

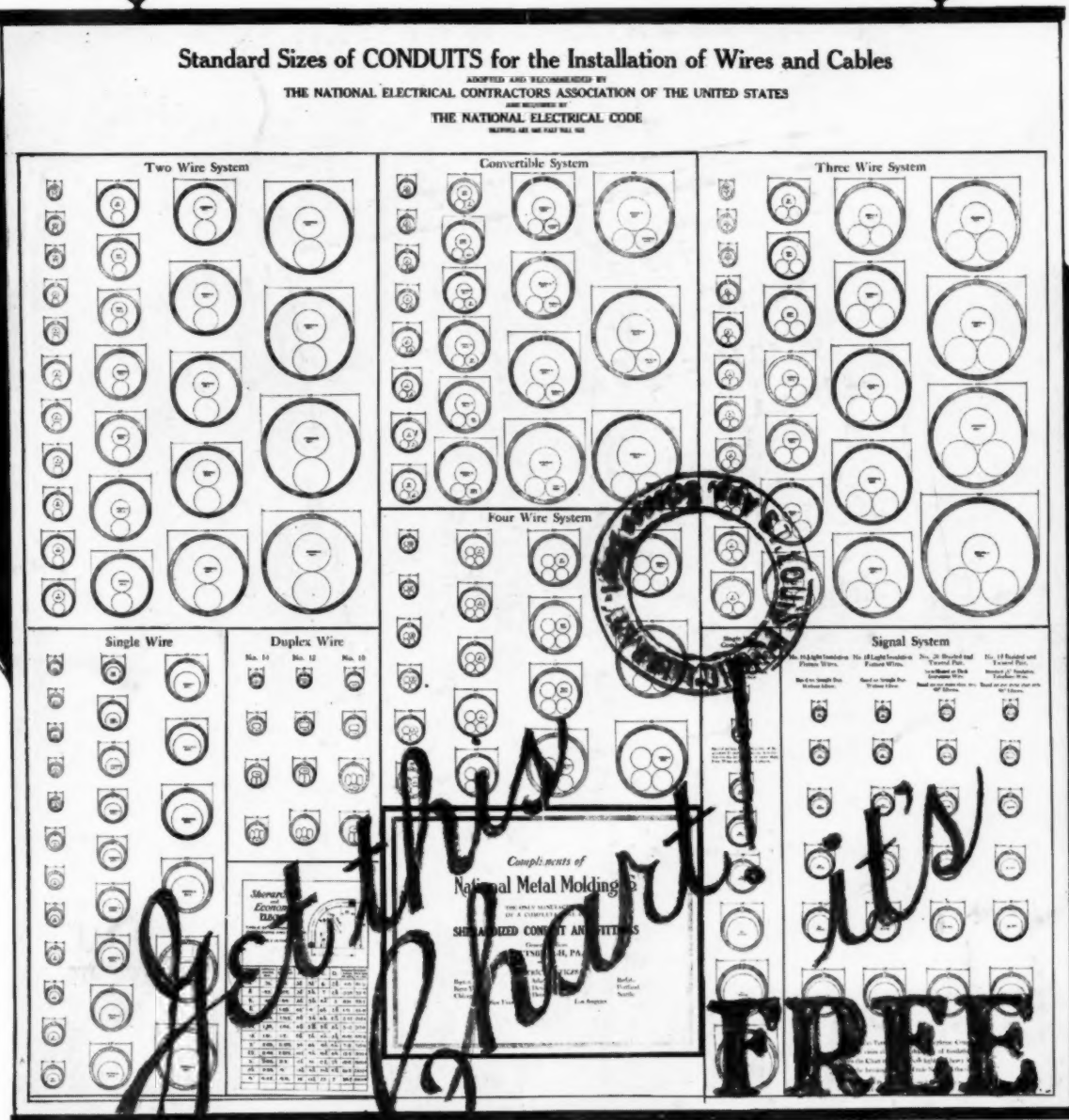
# The Electragist

TRADE MARK REG. U.S. PAT. OFFICE

Vol. 25, No. 5

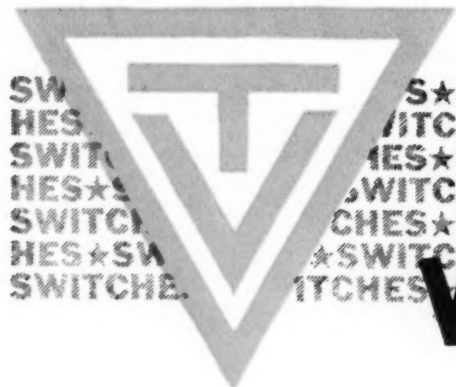
Association of Electragists  
INTERNATIONAL

MARCH, 1926



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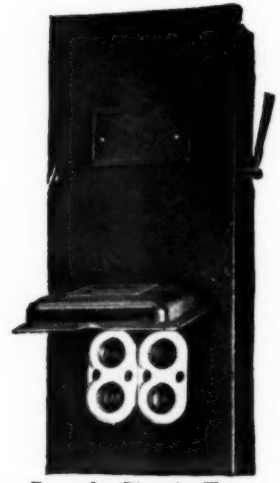


# TRUMBULL VANDERPOEL

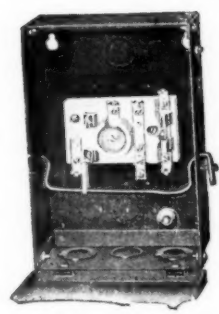
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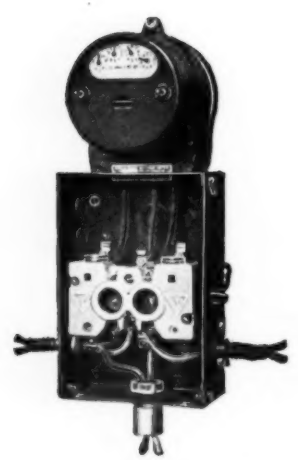
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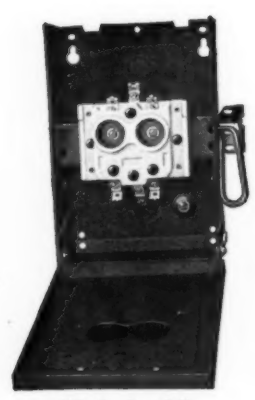
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# *The Electragist*

(The National Electrical Contractor and The Electrical Contractor-Dealer)

Official Journal of the  
Association of Electragists—International

Vol. 25

MARCH, 1926

No. 5

## The Contractor-Dealer and His Rich Relations

### Some Signs that Show the Central Stations and Jobbers Are Awakening to the Necessity of a Healthy Contractor-Dealer Group

By H. H. STINSON  
Associate Editor, The Electragist

PERHAPS the hardest thing the contractor-dealer has ever had to do has not been to sell his goods to the public, but to sell himself to the rest of the electrical industry. Because he is, on the average, small—in volume of business only—he has been snubbed by his comparatively gigantic brothers, the central station, the manufacturer and the jobber.

Some central stations practically forgot he was in business, judging at least by the way they went after his wiring and merchandising customers. Jobbers took his best accounts, the industrials, right out from under his nose by means of lower prices whenever it suited them and then expected to go on getting his business. Certain manufacturers went direct to the consumer and then tried to soothe the dealer by sending him a bundle of elegantly engraved dealer-helps.

But now there are at least signs of the dawn for the contractor-dealer. His representatives are being listened to with respect at industry conferences and here and there a central station, a jobber is making its plans with the welfare of the contractor-dealer in mind.

Thus the contractor-dealer is surely,

if still somewhat slowly, finding his proper place in the web of the industry. It is probable that the average contractor-dealer will always be a man with a small yearly business. By that, I mean that the great firms doing upwards of three, four, five hundred thousand dollars worth of business a year will always be few and far between. Nevertheless the fact that his volume is usually limited by the individual character of his business does not mean that he is not and will not always be as important to the industry as any of the other three sections of the field.

#### A Central Station Letter

One of the foremost companies to realize this has been the Pacific Gas and Electric Company, the policy of which has been discussed in these pages previously. The spirit in back of that policy is illustrated in the following letter, mention of which has been made before:

"In connection with the electrical work done for this company by contractors in installing appliances under our plan, it is desirable that we co-operate fully with the contractors who are well established in business.

"In numerous cases contractors, sometimes called curbstoners, have been able to cut prices to an extent where, if prices were the only factor, they would be awarded all the

business. We must keep in mind that if the legitimate contractors who are paying rent and maintaining a permanent place of business are discouraged, that it will have a tendency sooner or later to retard their business and make it difficult for them to survive.

"It should be our aim hereafter, wherever possible, to try and maintain a high standard among electrical contractors who are members of the Association of Electragists. The entire electrical industry is looking to the Electragists to successfully carry through the Red Seal plan for wiring electrical homes, and it should be the effort of every man interested in the electrical industry to see that the men who are doing constructive work in the contractors' group should be given, wherever possible, such business as the utilities have to offer.

"A chain is no stronger than its weakest link and the contractors' group, which is one of the most important of the four main groups in the electrical business, should have that support which will enable it to maintain a high standard."

In line with this letter the company has worked out plans whereby contractor-dealers in its territory share in almost every merchandising activity of the company. While housewiring is not included the layout covers most of the contractor-dealer's other important activities, the main classes of sales work including electric ranges, water heaters, air heaters, refrigerators, kitchen lighting units and lamps, store and window lighting, sign and industrial lighting,

industrial heating, commercial heating and cooking and isolated plants.

The campaign is co-extensive with the entire system of the company, which covers 38 counties, containing 2,158,000 persons living in 291 cities and towns. The details of the plan are many and have been listed before, but the main points are that the company handles term paper for the dealers, sells them the goods at attractive discounts, guarantees a flat installation charge and then reimburses the contractor for extras, handles the collections, does a great deal of newspaper and direct mail advertising and arranges dealer's show windows and demonstrations.

This central station views the contractor-dealer from two angles. Realizing that because of its magnitude, the central station must take the lead in co-operative relations, it has done so. But it has not formed its policy on the assumption that the contractor-dealer is a child or a moron. It has given him an opportunity to do real selling work and, according to reports, results have justified the policy.

Though the Pacific Gas and Electric Company was the first to inaugurate this far-reaching plan of co-operation, the Southern California Edison Company has not been far behind. At the recent meeting of the California Electragists, Southern Division, at Catalina, there were explained special sales plans for six months in advance. Plans and specifications for several standard range and water-heater installations have been prepared and the Edison company has announced flat installation charges based on those plans and specifications. This will allow the quoting of prices of ranges installed. It will also reduce the contractor's overhead, as the company representative will issue an order to a contractor to install a job at a definite place in accordance with one of the plans and thus eliminate any selling expense on the job. It will not even be necessary for the contractor to see the job in advance of delivery of the ma-

terial for the installation. After its completion the contractor will make out an invoice to the company and will receive immediately a voucher paying this and cutting out collection expenses for him.

This campaign, while not as extensive as that of the central station in San Francisco, is certainly a step in the right direction. It shows the trend of thinking on the part of the central station heads where the contractor-dealer is concerned.

Coming a bit further east there is discovered a real triumph for the co-operative idea. For some time the situation between the central station in Denver and the contractor-dealers there has been rather strained, the contractors

and the central station will handle all acceptable time payment paper. Installation of units is to be turned over to all interested contractors on an equitable basis. The contractors' association of the city has represented their section of the field in the negotiations for the arrangement of plans.

This move is so new a policy on the part of this central station that its results will be watched with considerable interest by the electrical industry all over the country. If it wins out there—and there is plenty of reason why it should do so—it will give the movement for central station-contractor co-operation one of the biggest boosts it has had.

In Philadelphia also extensive co-operative plans have recently been put into operation.

All last fall conferences were held between a committee of the Philadelphia Electric Club and executives of the Philadelphia Electric Company, looking toward a co-operative plan of merchandising and advertising of appliances and towards the end of October an extensive plan had been mapped out and agreed upon.

It provides that the company extend to any wiring contrac-

tor, who wires an old house, the privilege of selling to his customer any electric appliance of standard or approved make upon the standard terms and conditions of the company lease forms, for this type of apparatus, during a period of one year after the residence wired has been connected.

The company will provide the lease forms to the contractor which he will have the customer sign and which, after such lease has been approved for credit, will be taken over by the company and collections of the deferred payments made by it, the list price of the appliance being paid to the contractor by the company after the second installment has been paid by the customer.

The various campaigns on appliances conducted by the Philadelphia Electric Company each month for definite pe-



The Public May Look But Can't Buy in the G-Q Salesrooms

alleging that the power company was unfair in its methods of competition for both wiring and appliance business and the central station declaring that the contractors were not being energetic enough in developing the field.

It has been announced within the last two weeks that this central station, the Public Service Company of Colorado, has invited all the contractors in Denver to participate in the principal commercial campaigns of the company.

The first big project scheduled is a store lighting campaign featuring an enclosed glass unit. Arrangements have been made already for contractors to sell these units independently or to act as representatives of the company in which case a commission and hanging charge is to be allowed. Deferred payments of \$1 a month will be featured

riods (other than clearance sales) may be participated in by the contractor-dealer in the following manner:

The contractor-dealer may sell to any of his customers the appliance being campaigned, according to the terms and conditions of such campaigns on the lease forms of the company. A commission of approximately 15 percent is paid the contractor-dealer.

The advertising, either in newspapers or by broadside mailed to lighting customers, will contain the information that during the campaign the particular appliances may be purchased from the local dealer or from the company.

Co-operative advertising will be done by the Philadelphia Electric Company in newspapers and by street car cards, calling attention to the opportunity of purchasing all such appliances from the customer's local electric dealer.

#### Excludes Small Appliances

This plan is obviously fitted for the sale of the larger and more important devices. Some of the smaller appliances, such as the electric iron, are not included for the reason that the dealer can readily make cash sales of the iron at probably lower prices than the company can.

Here then we have the spectacle of four great central station companies recognizing their need of the contractor-dealer in building up their load and realizing that he cannot be of much help to them if he is fighting for his life against them all the time. There is not much doubt that the idea is going to spread and wherever the contractor-dealer and the power company are working together the use of electricity by the consumer is going to go ahead by leaps and bounds. As yet none of these plans have been in operation long enough to supply reliable statistics on the increase in load and the increase in contractor-dealer business, but these figures are going to be interesting.

Turning from the central stations to the jobbers an improvement in the situation is also found. The only real bones of contention that contractor-dealers have had with jobbers are their policy of soliciting industrial accounts, selling at retail and granting courtesy discounts, taking advantage of their jobbing discounts to undersell the contractor-dealer at both points. There has been a good deal of discouragement among the contractor-dealers over this and a good deal of saying, "There's no way of remedying the situation."

There is a way of improving it and that is by means of a mutual understanding between the jobber and his natural outlet, the contractor-dealer. Furthermore there is definite evidence of a movement toward this better understanding.

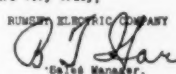
Starting again with an instance from California we find that the jobbers in the northern section of the state—the association jobbers—are protecting their contractor customers on industrial sales. Some of the jobbers in many cases route their industrial sales through their contractor customers in the town where the sale is made. And in any case the jobber maintains a differential discount to industrials which is in favor of the contractors. Much the same situation obtains in Louisville and its trade territory and to a lesser extent in Kansas and Virginia. In other parts of the country jobbers have not as yet made any move toward protecting the contractors on industrial sales, but the few instances above show at least how the wind is blowing and it is to be hoped that the movement will gradually gather momentum. By the word "industrial" it is here meant the smaller industrial which is the natural customer of the contractor, not the very large industrial with a well-organized electrical department.

Where retail sales by jobbers are concerned there is more evidence that the distributors are beginning to think of the welfare of their best customers, the dealers. Just within the last few months there have been a number of cases where prominent jobbers have gone out of the retail business, announcing a policy of "At wholesale only."

In Milwaukee the G-Q Electric Company, a General Electric jobber, has been leading the way toward this. The company maintains an appliance display room for the public, but no retail sales are made there and all inquiries are referred to their dealers. The company policy is briefly stated as:

"We help to increase dealer's profits

by displaying on our second floor sales room merchandise items which can be sold by the dealer direct to his customers. Thus we carry a part of the dealer's investment and reduce the size of the display space he had to have in his store. We furnish him competent salesmen to help sell his customer. We do not enter into competition with him on any of our merchandise. We refer inquiries resulting from our manufacturers' national advertising to our dealers. We put the dealer in touch with

<b>RUMSEY ELECTRIC COMPANY</b>		
ELECTRIC SUPPLIES AND MACHINERY		
DIRECT REPRESENTATIVES OF THE PHILADELPHIA ELECTRIC CO.	1007 ARCH STREET PHILADELPHIA	SPECIALLY REFERRED TO "Wholesale"
June 20, 1925.		
SUBJECT: Rumsey Sales Policy		
TO ALL ELECTRIC CONTRACTORS AND DEALERS:		
We have established the following sales policy:-		
Purchases made in our store will be at consumer's prices unless proper credentials which entitle the bearer to dealer's prices are shown. A card is not sufficient credential.		
We will send commission to the Electric Contractor or Dealer (the electric contractor's or dealer's name having been given us by the purchaser) on all sales at retail price, this to be the difference between retail and dealer's price.		
The policy as outlined above is certainly "REAL WHOLESALE PROTECTION" and we trust will merit a larger proportion of your valued business.		
Yours very truly,		
 J. J. Rumsey Sales Manager.		
P. S.—Proper credentials must be shown to secure Electric Contractor's and Dealer's discounts, as stated. May we have your full co-operation?		

#### In This Letter the Rumsey Company Set Forth Its Determination to Protect Its Dealers

financing companies handling time payment paper."

But the "Wholesale Only" policy is enforced strictly. There are signs, such as the one shown in the illustration, placed about the sales rooms emphasizing this.

In the east there are several more instances of discontinuance of retail stores and counters by jobbers. The New York office of the Manhattan Electrical Supply Company has announced the closing of one of its retail stores in New York City and the disposal of the other to a radio dealer. From now on the company will confine itself strictly to distribution activities so far as the metropolitan area of New York is concerned. The Stanley & Patterson Co. has also discontinued its policy of sell-

ing at retail and will limit its sales to those firms and individuals who are entitled to wholesale discounts.

The policy of the Pettingell-Andrews Company, one of Boston's largest jobbers, is particularly interesting because it is so well defined and places as much responsibility on the dealer as the company assumes itself. In other words, it feels that the dealer must co-operate with the jobber if he expects the jobber to work in his interest.

One of the sentences in the company's statement, issued last fall, is illuminating, reading, "We believe that dealer protection by the distributor and manufacturer is necessary to the prosperity of the electrical industry." In an effort to provide this protection the company has drawn up the following policy:

#### A Dealer Register

No sales will be made direct to the consumer of any merchandise except fixtures. On fixtures the dealer is protected if he will register with the company any wiring contract that he gets immediately upon it being signed. If this is done the company will co-operate with him to sell the fixtures and protect his profits except on large bank and building jobs where there is competition by outside interests. Whenever the company accepts a retail order for appliances the sale will be billed through the dealer selected by the customer, if that dealer is registered with the company. Under no circumstances will the company make any retail sales direct. Where industrials are concerned the company will continue to sell to the very large ones, who would buy direct anyway by virtue of their large volume of business, but will encourage the smaller industrials to buy through the dealer.

Going back to collective effort by jobbers to improve the condition of the contractor-dealer there is the Milwaukee plan for distribution of the A. E. I. Standard Accounting System among contractor-dealers in that territory. The details of this have been so often discussed that there is no need of reciting them again, except to say that contractor-dealers can secure the Standard Accounting System by meeting certain requirements and that the jobbers furnish the monthly services of an accountant to those dealers desiring them.

In the last three issues of THE ELECTRAGIST there appeared installments of "A Business Guide for the Small Contractor-Dealer." This guide was

compiled by a group of jobbers in Los Angeles, published at their expense and distributed to contractor-dealers free.

The problem of courtesy discounts is something else that has been a thorn in the side of the dealer. What good did it do him to work up the enthusiasm of a prospect for a washing machine or cleaner or other appliance when the prospect could find some friend with a little influence and through his good offices go to the jobber and buy the appliance at the same price the dealer had to pay? But even that situation is beginning to show signs of amelioration.

For example, the Alexander & Lavenson Electrical Supply Company of San Francisco sent out this letter to its customers:

"Each day the question of the courtesy discount becomes more paramount. The courtesy discount is not productive of good business relationship—is not necessary and tends to discourage effort toward bigger and better business.

"The courtesy discount is becoming a nuisance to both distributor and dealer. From the distributor's end it means that someone who is not entitled to buy is trying to beat the game. From the dealer's angle it means that in order to maintain his standing with good accounts, he must sacrifice a legitimate profit on an item which he does or does not carry in stock—most often an item which he has been privileged to buy from his distributor by reason of contact on other materials. This action may be voluntary or involuntary.

In any case it is not good business, and furthermore is denying to a legitimate dealer the opportunity of making a sale at a profit."

A similar spirit has been shown by the Rumsey Electric Company of Philadelphia, which sent to its customers the letter reproduced on page 15.

All the particular cases cited in this article, of course, are only like two or three straws in a haystackful when they are compared to the number of central stations and jobbers who are still clinging to the superstition that business is "Every man for himself and devil take the hindmost." Carrying this analogy a bit further it is evident that every time the devil takes the hindmost he gets that much closer to the man in front. But it isn't necessary that there be a hurricane before a man can see which way the wind is blowing. A few straws tossed into the atmosphere will show it just as well and the instances above are serving as straws. And it is all very gratifying to the Association of Electragists, International, which was one of the first groups in the industry to wrestle with group trade relations through its Trade Policy Committee.

The millenium isn't here yet, perhaps never will be, but there can be no mistaking the signs. Co-operation between the contractor-dealer, the central station and the jobber is on the way.

## The Electragist and the Industry\*

By I. L. Faucett

THE life of the pioneer contractor-dealer, or Electragist as he is now known, was not always happy. I was a contractor at one time myself and I know. When electric light companies followed the practice of furnishing free lamp renewals, and cut prices on other electrical merchandise, and the jobber never turned down an order from an industrial plant, dealers were driven to despair. It has been only in very recent years that the Electragists have had an opportunity to develop and grow with the industry. Super-power has made it possible to carry power and light not only into the small villages all over our state, but into the homes of the farmers who may now enjoy all the conveniences of the city.

Consequently owners of unwired homes in the outlying districts are having houses wired and the demand for domestic electrical devices, such as irons, percolators, toasters, vacuum

cleaners, ranges, washing machines, ironing machines and more recently refrigerating machines has increased a thousand fold. Electragists as progressive business men have taken advantage of all this and have by hard work and co-operation won a permanent place in the four square electrical industry. Their great value in the capacity of load building is now fully recognized by the electric light and power companies. By this recognition they have become associated with and are a working force in one of the great industries of the age, an industry that is growing by leaps and bounds. I think I can safely say that the other three corners of this four square industry, the manufacturer, the central station and the jobber, fully recognize the Electragists' worth in its upbuilding.

\*Abstracted from an address delivered before the 1925 annual convention of The Tennessee Association of Electragists.

# Window Lighting That Sells Window Lighting

By C. W. KAYSER

Superintendent, Tollner Electric Company, Inc., Brooklyn, N. Y.

THE best salesman in the world would be handicapped if he had to do all his selling by "talk power" alone. He could recite facts, figures and fancies and make glowing promises all day long and it all would have less effect than if he just handed over a sample and said: "Here's what I have to offer you. You can see just what it is and what it will do for you."

This is truer of selling lighting than of almost anything else. Foot candles, color screens and all the other technical matters don't mean much to the layman. But if you can show him exactly what his store or his window is going to look like after you have put in the illumination needed the sale is already half made.

One of the big parts of the metropolitan contractors' business is window lighting. Why, then, do so many contractors have poorly lighted windows in their own establishments? Neglecting our own windows and then trying to sell window lighting to other merchants is like advertising a washing machine demonstration without having a machine to demonstrate.

For that reason, our company, when it moved to a new store recently, decided to put in the most up-to-date window lighting system possible, not only because it is good merchandising practice for any kind of store, but also because we could then use our own window as a means of showing prospects what we could do for their windows. The installation we have now is not surpassed by any that I know of, even among the largest department stores that make a fetish of good window lighting and it was put in at a cost that was not at all prohibitive.

The show window of our store is very deep, the dimensions being 10 ft. 9 in. along the front and 7 ft. 6 in. in depth. The hung ceiling is 10 ft. 8 in. high. The reflectors are set flush and finished off around the edges with a ring furnished by the Curtis Lighting Company.

The ceiling is sloped at an angle of 15 degrees for the two front and side rows of reflectors and 20 degrees for the back row.

There are twenty-two No. 500 King X-Ray reflectors and ten No. 400 X-Ray reflectors in the window, placed as shown on the diagram below. The twenty-two No. 500 reflectors are wired on four circuits and each reflector and circuit is controlled by a separate toggle switch. This separate control is a feature which will be explained later on. The ten No. 400 reflectors are wired on two circuits and controlled by two toggle switches.

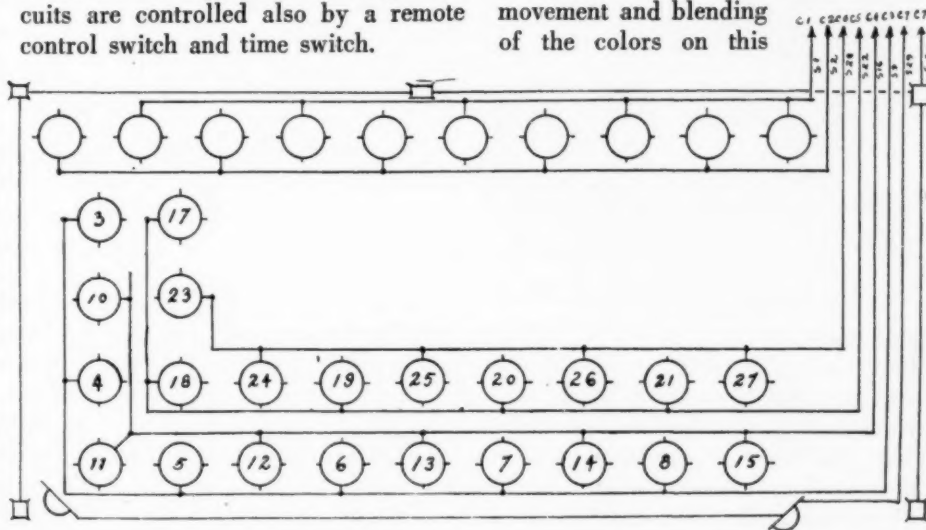
In the front corners of the windows are two spotlights, also controlled by a toggle switch and wired on a separate circuit. There are also five floor boxes controlled by a toggle switch and wired on a separate circuit.

Control of the window lights is through thirty toggle switches located in the store and eight circuits, run to a panelboard in the basement. This panelboard is so constructed that the window lighting is controlled by a flasher and dimmers for the blending of color and color changes, another advantage which will be explained. The eight circuits are controlled also by a remote control switch and time switch.

Sufficient reason for the unusual separate control system installed is found in the demonstration possibilities of the window. No matter whether a prospective customer wants anything from two lights up to a whole battery we can show him the exact effect he will obtain by using just that number of lights. One illustration of just what he will get with a certain installation is worth more to us and to him than a week of explaining and drawing diagrams.

In addition we use the separate control to get almost any combination of colors. At the present time we are using alternate red and blue color caps on the reflectors in the back row; orange, green and red on the second row, while the caps on the front row will almost always remain white. Of course this disposition of color caps can be changed at will to get any effect desired, but that described above will give practically every combination of light that a customer might wish to see.

By using a curtain of neutral tint at the back of the window we can throw the colors on it and obtain a perfect blending of colors. At present we are considering installing equipment which will give an automatic continuous slow movement and blending of the colors on this



Wiring Layout for the Tollner Window. The Numerals at the Outlets Indicate the Switch Control S—Switch. C—Circuit

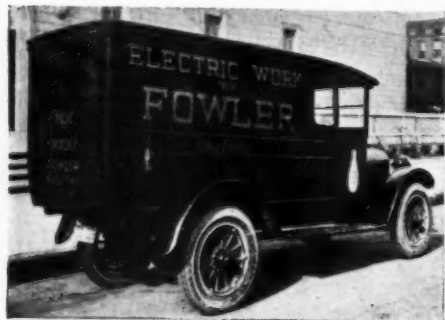
curtain, an effect which will undoubtedly catch the eye of the public, just as the color organ in use in some theatres has caught the imagination of the public. It has been demonstrated many times that moving objects in a window will attract attention and moving color ought to attract more attention. And in a street where all the other windows are of one color, such a window will stand out as though it were the only lighted window in the city.

Already two prospective customers for window lighting jobs have come to us unsolicited, their interest having been aroused by our installation.

As a matter of fact, our whole new establishment lends itself to the demonstration of light. The store was formerly a dairy restaurant, having the usual tiled walls which are excellent reflectors of light. The only lighting needed in the store proper consists of two bowl-type fixtures which, aided by the tile walls, give the effect of six lights of the same size hung in an ordinary dark-walled room of the same dimensions.

### Advertising on Wheels

Joseph A. Fowler, president of the A. E. I., believes in practicing what the association preaches. For a long time it has been urged upon members that one of the best ways of advertising the names, both of an individual business and of the "ELECTRAGIST" trade mark, is to put them on the company trucks



The New Fowler "Advertising on Wheels"

and delivery cars. In this way publicity can be carried all over the city and put before people who could not be reached by any other form of advertising; and the first cost—that of having the painting done—is the last cost. The picture shown here is of a new Reo delivery car just put into service by the Fowler company.

## "The House Electric" Does Some Store Planning

The latest ideas in the well-planned electrical store are exemplified in the new establishment of the Michigan City (Ind.) Electric Company, known to the trade as "The House Electric." In drawing the plans for the new store, into which the company moved shortly after the first of the year, much thought was given to obtaining the maximum amount of display and store facilities in the minimum of space without making the store seem crowded. This was

accomplished by using wall cases, counter and portable lamp cases made of steel and glass. The layout is so well planned that it has been possible to divide the space into a main show room, five fixture and radio display rooms and a stock room and repair shop in the rear and still leave plenty of working room in each. Steel shelving is also used for bins in the stock room. The office is on a balcony at the rear of the show room.

To the Right is One of the Fine Fixtures and Radio Display Rooms of the "House Electric"



The Steel Cases and Counter in the Main Show Room, Pictured at the Left, Give a Neat, Efficient Look to the Whole Store

### Installing Ventilating Fans With Storm Windows

Dealers selling ventilating fans in the northern section of the country where the severity of the winters make necessary the installation of storm windows, according to *The Emerson Monthly*, occasionally find difficulty in installing the fans in such a way that no current of cold air will penetrate into the house.

One method of installing ventilating fans under these conditions is to make the storm sash shorter than the inside window by a distance equal to the depth of the fan mounting board, a louver or automatic shutter being mounted above the storm sash. This louver consists of

a number of aluminum leaves or shutters assembled in a rigid metal frame in such a way that pressure from the fan automatically opens the leaves as soon as the fan attains speed. When the fan is shut off the leaves close of their own weight and the cold air is kept out.

The fan is installed inside the inner window at the top of the sash. The inner window has a board fastened to it at the top on both sides to fit the space between the sash and the fan board and the sash and the louver. In this way when the inside window is pulled down and the fan started there will be no draught of cold air between the board and the inner window.

# Electrical Committee Acts on Unarmored Assemblies

**Takes First Step Toward Permitting Broad Use and Application of Unarmored Assemblies—Decision Must Go to N.F.P.A. and A.E.S.C. Before Inclusion in Code**

A MUCH broader use and application of unarmored assemblies than that suggested by the Article V Committee majority report, as given in the February *ELECTRAGIST*, was voted by the Electrical Committee, N. F. P. A., at its annual meeting held in New York on February 18 and 19.

A minority report which did not differ very materially from that presented in our last issue was adopted by the committee with a few minor amendments, the vote being 24 to 11. It provided for the use of such assemblies in the broadest way, permitting their use for both open and concealed work without separation from surface wired over, in fished work and for both branch circuit and feeders in sizes No. 14 to No. 8, inclusive. In addition all restrictions as to type of occupancy were removed.

## **Procedure Before Inclusion**

The vote of the committee, however, must first be confirmed by letter ballot to the entire membership of the Electrical Committee, the results then accepted by the National Fire Protection Association at its annual meeting in the spring and finally accepted by the American Engineering Standards Committee before it can be included in the Code as an American Engineering Standard.

Those who were in the minority insisted on a record of each vote in order that they might present their report to the Standards Committee as a minority report.

The session that considered the reports on unarmored assemblies was opened by the reading of the Article V Committee majority report by A. Penn Denton. This was followed by the reading of the minority report containing the installation rules proposed by W. H. Blood, Jr. This was read by Alexander Maxwell, Mr. Blood being absent, due to illness. It was then moved to substitute the installation

rules proposed in the minority report for those proposed in the majority report. Personal statements from both Mr. Denton and Mr. Blood were then presented to the committee, each statement supporting the rules respectively urged by them. After a discussion by T. J. Creaghead, A. R. Small, the committee chairman, reported that he had received signed letters from inspectors in thirty cities, each letter stating that the writer had personally examined installations of unarmored assemblies and wished to report favorably on them. There was then a roll call which produced the vote of 24 to 11 in favor of substituting installation rules as noted above.

It was found, however, that the rules proposed by Mr. Blood were not in proper editorial shape for inclusion in the Code and Mr. Small, as editor, was empowered to change their wording in several places.

In addition to not accepting the minority report verbatim, the committee made a number of formal amendments, mainly embodied in its instructions to the editor to insert the sense of paragraphs 501m, n, o and s, 1925 Code, which relate to open work, in the requirements to be submitted by letter ballot.

## **Other Changes**

The entire matter of unarmored assemblies was considered on the second day of the meeting, but the first day also produced a number of additions to or rewording of the Code, some of them of unusual interest. There were in all about 25 changes proposed. At the outset it was decided to have appear in the National Electrical Code a substantial proportion of the rules of the National Electrical Safety Code, particularly those items which have passed the controversial stage and have become common practice.

It was announced that the committee appointed last December to consider

portable electrical devices was now organized and would have a report ready for the 1927 meeting.

Decision was made to take no further action on the investigation of armored cable, proposed last summer.

There was some discussion as to whether the changes made this year be part of a new code for 1926 or whether they be made a supplement to the present code. The means of recording the action of the committee as official was left to the decision of the N. F. P. A.

Another change concerned the final dates for proposal of changes and notification by the secretary. Hereafter all article committee reports must be in the hands of the secretary by January 1 and he shall bulletin them thirty days in advance of the Electrical Committee meeting. In line with this, proposals of changes must be submitted to the article committees before October 1 instead of November 1, as formerly.

Moving on to the technical agenda, the committee took no action on Articles I, II, III and IV. The report of Article V Committee listed quite a number of matters. No action was recommended on the subject of temporary wiring in buildings under construction. Paragraph 501j was changed to read "wire when supported on solid knobs shall be securely tied to." Paragraphs 503b and 503c were changed in wording but not in sense. In 503o a new table of gutter widths was provided for feeders carrying from 100 to 1,200 amperes where they leave cabinet vertically. Paragraph 504a was revised to permit use of metal molding in extensions of branch circuits when concealed in plaster in fire-resisting buildings. Paragraph 505b was changed to permit the use of armored cable in the same way.

## **Underfloor Raceways**

It was decided to take no action on the question of laying metal raceways

in loose cinder fills for floors. Action was taken to have the Code recognize underfloor duct systems, either of fibre or metal, and rules for their installation were agreed upon.

A complete revision of the text of paragraph 602g was made, rephrasing rule of polarity identification. Paragraph 603b was amended to provide that each conductor of flexible cord for general use have a carrying capacity of No. 18 wire. Change of paragraph 603e was made to call for submission of other types of flexible cords for examination. The purpose of the latter two changes is to recognize the use of tinsel cord and develop proper specifications for it. This may also pave the way for a change in specifications for fixture wire. Paragraph 609a was amended so that the rule which formerly called for a three-braided covering on certain wires now reads, "shall consist of three braids or their equal." Action was also taken to meet the situation complained of by certain manufacturers concerning the rule for polarity identification in armored cable.

A change in paragraph 701i permits the use of the clamp form of conduit fitting in exposed work.

Article VIII Committee reported work under way on the proper diversity and load factors in copper risers and feeders in office buildings and also on motor wiring tables, reports on both being promised for 1927.

There were no reports on Articles IX, X and XI.

A report is expected in 1927 from Article XI Committee on the regulation of performance of equipment for spark ignition on oil-vapor burners.

There were no reports on Articles XII, XIII, XIV and XV.

Article XVI was amended to include rules on the installation of current-consuming devices, which in addition to electric heating appliances seem to deserve attention as to when they may be connected to special circuits, all as indicated by the present direction of Article XVI as applying to heaters only. This will include refrigerating apparatus. Paragraph 1,602c was changed to permit the use of type C lamp cord on heaters instead of heater cord, only when the cord is exposed to temperatures over 250 degrees F.

There was no action on Article XVII to XXXII, inclusive.

Article XXXIII was revised to per-

mit the use of metal molding in garages.

No important changes were made in the remaining articles and the meeting adjourned, after having voted its sympathy for Mr. Blood in his illness.

## New York Apartment House Bell Wiring Methods

By J. A. Hawthorne

Apartment house bell wiring practice in New York can be divided into four distinct classes. The wiring diagrams of these systems were found to conform to the conventional methods which are well known and need no explanation here, except that it might be well to mention that the common return has become universal practice in the interest of wire economy.

In the first class is the conduit system which has become standard practice in wiring all large apartment houses and apartment hotels. Advantage is taken of the dumbwaiter shafts for running the risers and where the individual circuits branch off at each floor a regular junction box is installed which serves two purposes, first to contain the splices and, second, to act as a pull box. Instead of using ordinary cotton insulated bell wire, No. 18 rubber covered fixture wire is used. These risers are so installed that all the "A" apartments are on one riser, all the "B" apartments on another and so on. All these conduit risers terminate in the basement where a proper terminal board is installed in an iron cabinet which contains also the transformers, one transformer being used for each riser.

On every large job such for instance as an eighty apartment building this method actually saves a considerable amount of time and simplifies the wiring both from an installation standpoint and maintenance end.

In the second class the individual circuits are wired one at a time and the riser wires dropped down the shaft to the basement and tagged. When the remaining wiring in the basement is completed and the system tested out the circuits in the shaft are bunched together at intervals by taping and secured to the shaft wall by pipe straps. This system is best adapted to the smaller type of apartment house where the building is four story and basement and has two apartments per floor.

In the third class a multiple conductor cable is used. This cable may

have any number of conductors, according to the job. Such a cable is composed of parafined double cotton covered conductors and is installed in a way similar to the conduit system. There will of course be some conductors that are not used, but it is considered good practice to leave these intact for spares in case of trouble or for future extensions to the system. This system is more adaptable to a larger type of apartment house than that described for the previous class. This system has for its source of current supply a transformer for each riser cable and the cable may or may not terminate at a terminal board.

The fourth class is a system wherein the riser cable is made up in the shop and taken to the job and installed. In order to do this a strong string, say fishing line, is dropped down the shaft and at each point where the individual circuits leave the riser cable at each floor a knot is tied. After all dimensions are checked the string is taken to the shop and laid out on the floor, or perhaps on a board or some other convenient location and the cable made up and the circuits tagged. The finished cable is then taken to the job and installed.

This system is not a common one by any means and perhaps represents a new method in this particular field. It has decided advantages, first because it is a wire saver, second because it saves much time in installation, particularly when many such cables are required for one job, and third it can easily be made up in the shop by the lower paid mechanic such as the apprentice or helper, leaving the higher paid mechanic on the job.

## "Cheap" Is "Expensive"

Editor, *The Electragist*:

I am keenly interested in the articles in your February issue pertaining to the proposed code rules on unarmored assemblies, cheaper wiring and the reply to that letter, and reinspection. Congratulations on your principles in standing solidly against cheaper wiring methods. I know that cheaper wiring methods are costly in the extreme. Anything cheap is ultimately expensive. Regardless of expense, we in this industry are bound to use the safest methods and the best materials procurable if we are to live up to our obligations to the public.

G. R. Salter,  
Maplewood, N. J.

# The Court of Last Resort— Mechanics' Liens\*

By STEPHEN LOVE

THE subject of mechanics' liens is concerned with the question of a lien upon realty or real property in favor of one who furnishes any type of labor, material, fixture or apparatus which is incorporated in that realty. The difficulty of the problem arose out of the fact that a lien is the right to retain possession of a particular thing until the claim with reference to that thing has been paid. Therefore, it is primarily a possessory right of retention.

If a jeweler improves my watch by repairing it he has the right to retain it until it is paid for. That is elementary. The problem arises, however, in this respect: How can manufacturers or installers of electrical fixtures install these electrical fixtures, expending labor on another man's property, thus parting with possession, and still have a lien on that with which they have already parted? . . .

Naturally we cannot go into such a subject even by way of an outline unless we go into it from the standpoint of the statute of some particular state to serve at least as a model in the discussion. Therefore, I will take the law in Illinois, although I will make my discussion so general as far as I can as also to embrace the rules applicable to the statutes of other states.

The statute which exists in Illinois was enacted in the year 1903. There were a number of statutes before that, but they are not the ones that operate now. The present statute has been known as the Act of 1903. It provides four distinct types of liens.

The first lien, for the purpose of this classification, is the principal contractor's lien. A principal contractor is one who has a contractual relationship directly with the owner of the property, or an agreement directly with the owner of the property or with the

## Get Acquainted With Your Lien Rights

The proper application of a mechanics' lien may oftentimes keep a contractor out of the red ink for the year. Despite this, many contractors are not too familiar with the methods of obtaining a lien. Even if they do understand something about the subject, there are many pitfalls there for the unwary. In the following article Mr. Love, for 24 years a practicing attorney in Chicago, discusses the subject in clear and non-technical language and tells who is eligible to apply for a lien, what to do to obtain it and, better yet, what not to do.—The Editor.

owner's agent, architect or superintendent.

However, if a man is not in the position of a principal contractor in that he has no contractual relationship with the owner of the property, but he has the contractual relationship only with the principal contractor, being thus one stage contractually removed from the owner, he is then in the position of a sub-contractor.

The third classification is a sub-sub-contractor. The fourth classification is a contractor for a municipality who stands on an entirely different footing from those other three classes. Thus we have—

1. Principal contractor.
2. Sub-contractor.
3. Sub-sub-contractor.
4. Contractor for municipality.

### Principal Contractor

Now we will discuss the principal contractor only, because that is the most important class for discussion and consideration.

A principal contractor is one who has a contractual relationship with the owner of the property, which may give rise to a lien. A lien is such an incum-

brance upon land as we will say, by easiest analogy for the layman, a mortgagee or the holder of a mortgage upon realty has.

A lien of a mortgage or a lien of a trust deed is not a lien on realty until it is recorded in the proper place as against that realty.

That is not true with reference to the kind of lien which a principal contractor may have. He may have a lien on realty in the sense that it fully incumbers the realty even though it has never been recorded, the world at large is ignorant of it and it is good even as against a totally innocent purchaser.

Briefly this is what that means: A man is buying a piece of property. He goes to a good lawyer to have the title examined. He examines the abstract or the guaranty policy and nothing on either shows that there is any lien in favor of the Ajax Electrical Company, we will say, for electrical fixtures; nothing in the abstract at all!

Therefore, the purchaser, being advised by his lawyer that the property is free and clear of incumbrances, closes the deal and pays the full purchase price of the premises and accepts a deed from seller. Then the seller goes merrily on his way and the buyer has the property. What does he discover? Two months later the Ajax Manufacturing Company comes in and files a claim for lien against his property.

He says, "This is outrageous! I was an innocent purchaser. I know nothing of the lien. It didn't show of record. My lawyer examined the record and didn't find any lien. Why should I, an innocent purchaser, be subjected to a lien about which I knew nothing?"

Why is it subject to lien? Because the lien which the Ajax Manufacturing Company, as a principal contractor, has upon that property is a lien which dates back to the date of the contract.

Suppose a company gets a contract for the installation of electrical fixtures

\* Abstracted from an address by Stephen Love before a recent meeting of the Electrical Credit Association Central Division.

on January 1. It installs them on February 1 and is not paid. The contractor is safe. March 1 the man for whom he installed the fixtures sells the property to an innocent purchaser who never heard of the Ajax Manufacturing Company, who knows nothing about its claim and who has paid the purchase price in full.

Yet, when the Ajax Manufacturing Company wakes up in the month of April and sends a bill to the innocent purchaser of the property, that bill forms the foundation for a lien which, in contemplation of the law, has been on that property even to the prejudice of innocent purchasers since January 1, the date on the contract! Therefore the lien is virtually, as against even innocent purchasers, a secret lien. . . .

Under what circumstances will a principal contractor have this kind of a lien? He must prove the existence of three things. First, a contract. It may be oral, written, express or implied. If he gets nothing but an order, even if he has no formal contract, if he gets an order over the telephone to install fixtures in a certain place and he can prove that it was the owner who gave him the order or his duly authorized agent, that is all he needs to prove.

The second prerequisite, although it is not thus enumerated in the statute, though it is clearly deducible from decisions, has to do with the character of the parties with whom that contract may be made. The contract may be made with the owner of the property.

#### Owner and Tenant

Owner in this connection may mean the owner of the absolute fee simple title. Owner may also mean only the holder of a leasehold interest in the premises. In other words, if the contractor is furnishing fixtures to a tenant who has a 99-year lease or a five-year lease or a one-year lease, as far as that leasehold interest is concerned he is the owner, and therefore if the contractor has a contract with him he may plaster his lien against that leasehold interest and foreclose the lien upon that lease and if the lease is worth anything the contractor can get the leasehold interest. If it is a 99-year lease it will be very valuable.

The best practice in a situation of that kind is to file separate claims for lien—one against the owner of the leasehold and a separate claim against the holder of the fee simple and describing his premises. . . .

The contract must be with the owner or with his agent, superintendent, architect or anyone who stands in a relationship of principal and agent. A contract may be made with one who is neither the owner nor the owner's agent, but is one whom the owner has knowingly permitted to make a contract for the improvement.

Let us illustrate: I am the owner of the fee simple estate which I lease for 15 years. In my lease I provide that tenant is not to make any alterations or improvements without my written consent and that, if he does so, it will not give the foundation for a lien.

#### A Perplexing Case

Having made such a lease I go about my business. The tenant commences installation of certain improvements, then he goes broke, throws up his lease and has no visible assets.

His lease is forfeit for non-payment of rent, it has no value. The contractor is in a precarious position.

So the problem then is, under what circumstances can a principal contractor with the tenant, assert a lien against a fee simple upon the theory that the owner of the fee simple estate knowingly permitted those improvements to be made—*knowingly* permitted it.

That phrase "knowingly permitted" leads to the difficulty, because as interpreted by the Supreme Courts of most every state and most definitely by the Illinois Supreme Court, "knowingly permitted" means that if the landlord knows of the improvements being made and does not object but sits back and says, "I don't have to worry; my lease says this man shall not make alterations or improvements without my written consent, and I have given no written consent, why should I worry about these improvements?" If he sits back and does nothing, but he knows of the physical fact of the making of the improvements, under those circumstances his fee simple title may be charged with a lien in favor of the contractor, no matter what the provision of the lease, if he knows of the physical fact of the improvements.

It is extremely good policy in every case where a contractor has a contract to install fixtures for a tenant to make his contract with the tenant and then, if he has any doubt about the tenant's responsibility, to write a letter to the holder of the fee simple title and tell

him that there has been a contract consummated with the tenant for the installation of these fixtures and that he intends to install those fixtures.

Then knowledge is brought home to the owner and unless he objects in writing and says the contractor is not to install these fixtures, except upon the responsibility of the tenant, the Supreme Court will unquestionably hold that the landlord has "knowingly permitted" the installation of those fixtures and that therefore his fee simple interest is subject to the lien. . . .

The third prerequisite to the existence of a principal contractor's lien has to do with the character of the labor or services or improvements or material which is furnished. It is not every sort of labor, it is not every sort of a material man, it is not every sort of a contractor who can get a lien even though he has complied with the two requisites, No. 1 and No. 2. He must furnish material of a certain type or fixtures, apparatus or machinery of a certain character, and if he is not within that type, he cannot get a lien.

#### Character of Material

Now as to the character of that material: If it be building material within the full meaning of the phrase all that he needs to prove in any case, after he has proven the first two prerequisites, is that the material was ordered and was delivered at the building for the purpose of and with the intention of being used in the building.

He need not prove whether that material was actually ever used in the building, whether it was ever incorporated. That is immaterial. . . .

But if he is delivering not ordinary building material but what comes in the classification of fixtures, apparatus or machinery, he must prove that his fixtures, apparatus or machinery became incorporated in and formed a constituent part of the realty of the building.

If he only delivers electrical fixtures to a place and leaves them there and goes away and they are never actually incorporated in the building, never form a constituent part of the realty, there is not much question but that he would be denied any right of lien because his fixtures, apparatus or machinery had not been incorporated in and had not formed a part of the realty.

So, to summarize, if he is a principal contractor, in order to establish his claim for lien, he must show three

things: First, a contract, oral or written, express or implied, partly express, partly implied. Second, that contract could be either with the owner, agent or one whom the owner or owner's agent has knowingly permitted to contract or to improve. Third, he must either show that he furnished building material or he must show he furnished fixtures, apparatus or machinery which were incorporated in and formed a constituent part of the realty.

When he has shown those three things he has a valid claim for a mechanics' lien which dates from the date of the contract.

Considering the interval of time, let's say the material is delivered at various intervals. Now do you prove separate contract for those deliveries? That is entirely and solely a matter of fact in each case. If it can be proved that this was all done under one contract then as to all the items—for instance, if there is one price set on a large order of fixtures, \$3,000 or \$3,500, to be delivered at times as called for, that is one contract and when the last delivery of the last item under the contract is made, that is the date from which the period of time to file the claim starts to run.

On the other hand, if they are separate and divisible contracts, if on one particular job the owner one day calls up and says, "Send me today 25 fixtures No. 1 as per catalog," and three or four days later he calls up again for a different item, and a week later calls you as to some other item, each of these forms a separate contract and the period runs as to each contract independently of the other.

#### Perfecting the Lien

Assuming that the lien exists, what must be done to perfect or preserve it?

If a man is the principal contractor, to preserve his lien he must file what is known as a claim for lien—in which he says that he, John Jones, has a claim against so-and-so with respect to this property, he having made a contract with Jones while owner of that property to do certain work of a reasonable and contract price of \$—— and he did install it and did enhance the value of the realty to that extent and therefore he (Jones) prays a lien.

Now he must be careful about where he files this lien. That is the first thing, because valid and meritorious liens have been lost by failure to regard this

caution. Ordinarily the lien is to be filed with the clerk of the Circuit Court of the county where the property is located in Illinois. It then becomes constructive notice to the world and becomes actual notice to such people as buy and look up the title.

#### Torrens System

But some property in Cook County has title registered under the Torrens System which is a system whereby all the incumbrances against a piece of property are registered on one piece of paper, a memorial of title, the original of which is on file with the Registrar of Titles.

The theory is that anyone, layman as well as lawyer, can look at that register of titles and say "This is the condition of the title. This is all the incumbrance there is against the title. There is nothing but this, and therefore I am justified in buying the property."

That Torrens Act is, in its theory and essence, conflicting with the Mechanics' Lien Act, as they were both originally written, because the lien is a secret lien for a period of four months and the Torrens Act on the other hand aims to show where you can find out everything about the property if you just look in the right place. So if a man has registered his title under the Torrens Act and then had a contractor do some work and then didn't register the claim for lien on his certificate immediately and in the interim he sold it, the contractor would be out his lien because the purchaser would be entitled to rely upon the recitals of the certificate which didn't show any lien.

So the caution is that before a contractor registers or files a claim for lien he first look up and ascertain whether the title to that property has been registered with the Registrar of Titles; otherwise known as the Torrens Office. It it has been then he does not file his claim for lien with the clerk of the Circuit Court, but with the Registrar of Titles in the Torrens Office.

If he files it in the wrong place his lien is out.

As to the time of the filing of the claim for lien as against innocent purchasers it is a period of four months; the time of filing as to the original owner, the owner with whom the contract was made, it is twenty-four months, always, of course, from the date of the final delivery of the material or fixture.

I am not suggesting that this be done, but if a contractor finds at any time that

by carelessness he has allowed the period to lapse he may follow the example of some contractors and go in and make a little additional delivery of something. They will find that something was wrong with the contract, that they didn't deliver as much as they should have delivered, they will send in another load of sand, so as then to claim that this is the final delivery and get the period extended so that it runs four months from that time. . . .

The sub-contractor is one who has a contractual relationship with the principal contractor only. He has no contractual relationship with the owner whatsoever. In what position does he stand? That is the position occupied by the man who sends fixtures in on orders from the principal contractor. He is called a material man, but he is really, in the contemplation of the statute, a sub-contractor.

Summarizing the requisites, he must first prove a contract, oral or written, express or implied, partly expressed and partly implied. Second, he need not prove such a contract with the owner because he is a sub-contractor. He need only prove a contract with the principal contractor. Third, he must prove that he furnished fixtures, apparatus, or machinery and actually incorporated them into the building.

#### Removable Fixtures

Some might like to know what, if any, rights they have on removable fixtures; for instance, a ceiling fixture that hangs on a hook or a motor that is attached on a base on the floor by bolts.

The question is one purely of fact. If the fixture has become so attached to the realty as to form a part of it in that it has been physically affixed to the realty so that it can't be removed without damage to the realty, the contractor has then a mechanics' lien claim, but he cannot go in and remove his fixture. He asserts a lien against the realty.

If, on the other hand, the fixture is so movable that in the contemplation of the law it does not form a part of the realty, then he has no mechanics' lien claim whatsoever, nor can he go in and take his fixture back because he has sold it and the title has passed. . . .

That is the worst possible situation from the standpoint of the material man.

We have said that the sub-contractor has the same three elements and prerequisites that a principal contractor has, but there is in his case a fourth

prerequisite and that is that he serve what is known as a 60-day sub-contractors' notice on the owner within 60 days from time of final delivery by the sub-contractor. That is an indispensable prerequisite to the existence of a lien in favor of a sub-contractor. . . .

A sub-contractor has a different period of time within which to file suit on his claim. A principal contractor may file a suit on his claim as against innocent owners within four months, a suit to foreclose I'm talking about; as against the original owner he may file it within two years from the period of final delivery. But a sub-contractor may file his suit within four months from the time that payment is due to him, so there is another little place where he can get a little extra time. He need not say or admit or contend that the day of final delivery was the same day as the day when payment was due.

He can say, "Why, I made final delivery, but I didn't expect payment for another 30 days." So he can say that his day of final payment is a certain day other than the day of final delivery and then from the day final payment

was due he still has four months within which to file his suit as a sub-contractor.

One more caution: A sub-contractor may be without any rights of lien because in the principal contractor's contract with the owner there may be a waiver by which the principal contractor waives his rights of lien. That waiver, under certain circumstances, will be binding upon the sub-contractor, so it is a thing to be careful about.

A man shouldn't furnish material or fixtures when he is in a position of a sub-contractor if he thinks there is any waiver or has any cause to suspect that a waiver is there, which waiver has been recorded in the recorder's office, because if it has been that binds him, although he may know nothing about it as a fact.

Those are the first two classes of liens. The third is sub-sub-contractors. Practically nothing is to be added on that score.

The fourth class is a sub-contractor for a municipality, or a sub-contractor for a contractor who has a contract with a municipality, and he may establish a lien on the funds due the principal contractor from the municipality. . . .

## Reinspection Suggestions

*Editor, The Electragist:*

Re-reading your March copy of 1925, page 34, I notice the headline "Out of Light Competition." It seems to me this competition can be overcome in a city of first and second class, where they have Electrical Inspectors.

First: Have a state law passed to the effect that before any factory, warehouse or business house, etc., can secure fire insurance they must have their electric work reinspected. That will give the electrical inspector a chance to reinspect the building, and also will catch the janitor or the fly-by-night contractor, who has been doing the work without a permit.

P. S.: Cut fire insurance rate, etc.

Second: Have a city ordinance passed providing that all electrical contractors must take out city licenses, and also require them to take out permit for each electrical extension, with a penalty for those who do work without permits.

Third: The insurance company is to notify the electrical inspection department about the firm that wants insurance renewed. The inspector will make such inspection, and at the same time he

will notice that some of the electrical work has been done by the janitor or someone who is not up to the standard.

Fourth: Electrical inspector shall ask the owner "who has been doing his electrical work?". With this information, the inspector can check his permit and find that there has not been any permit issued for said work.

Fifth: Inspector shall notify janitor or electrician, or whoever it may be, that he has done such work without a permit. Inspector can then proceed with whatever course he may see fit.

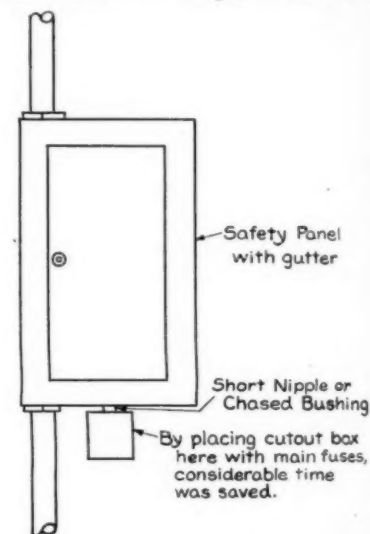
Sixth: Electrical inspector shall then notify the owner, that he must make the changes necessary to comply with the city ordinance, and have a licensed contractor to make such repairs. Contractor will make the repairs and notify the Inspection Department that the work has been done; also, he must take out a permit. One copy of the electric permit to be attached to the fire insurance policy, one copy to the electrical contractor for his file, and one copy to remain in the office of the electrical inspection department.

Paul C. Schorr,  
St. Paul, Minn.

## A Simple Correction of What Might Have Been a Costly Error

A certain contracting concern was recently awarded the contract to wire a new section of an office building. The specifications called for the panel boxes to be protected by main fuses. Owing to an error on the part of the panel box manufacturer panels which contained bus bars, branch circuit switches and branch circuit fuses, but no main fuse protection for the bus bars were shipped to the job and installed.

The panel boxes were so arranged that the branch circuit switches were located between the bus bars and the branch circuit fuses. The bus bars were of 75-amp. capacity and the branch circuit switches 10 amp., therefore the



local inspection department raised the question of switch protection and insisted that the branch circuit switches either be protected by the branch circuit fuses or that main fuses be installed to protect the bus bars.

The next important item to be considered was how the change could be made without incurring too much expense and at the same time comply with the inspection department's ruling. Accordingly it was decided to leave the panel boxes intact and provide a main fuse block and cabinet for each panel box, which was accomplished by placing a cut out cabinet immediately below the panel boxes as indicated in the diagram. The change was made in eight hours at a cost which was practically negligible in comparison to what it would have cost to change the panels and boxes since the riser conduits were imbedded in the concrete floor arch.

# Separating Extra From Contract Material on the Records

**W**HEN a contractor keeps as accurate records as he should one of the things he tries to have his system cover is the matter of keeping track of materials returned from jobs. This would not be hard if all the materials returned had been sent out on the contract, but in nearly every case the return includes a quantity of material sent out on an extra requisition. The question of how to keep the extra material separate from the contract material has been brought up by James A. Atwood, electrical contractor of Dayton, Ohio, who writes:

"Materials are sent out on jobs on our stockkeeper's order, order number and contract number being supplied, or order number and extra number, depending if the work is on a contract basis or time and material. Materials are returned on the 'Material Returned Report.' This plan works out very fine when the job is all contract or all extra. Our trouble begins when we have one or two contracts and one, two or more extras all on the same job. The returned materials then invariably come back to us under wrong numbers. In other words, there is a confusion, material returned on contract being reported back on an extra number and vice versa. We would like to inquire if you look to the journeyman to keep this straight on the job or to the stores clerk from his record of materials sent out on the job. The workman, you realize, would be taking his time at \$1.25 per hour, while a clerk's salary would be much less. However, there are times when material is changed on the job. That is, it is sent out with the intention of being used on the contract and is switched to an extra or the reverse.

"It is important that we know the quantity of material used on a contract, as we figure the cost of each contract separately. It is equally important that we have the exact quantities of material used on an extra as our customer is only willing to be billed and we only want to bill him, with the materials used on extra."

## Depend on the Foreman

The writer of the letter above isn't the only one who has trouble of that sort, as THE ELECTRAGIST found out when it queried several of its readers. F. A. Clegg & Co., of Louisville, report that they have been wrestling with the same problem for some time.

"The matter of charging for extra material, of course," they declare, "is

[illegible]

## Comparison of These Two Forms Will Help Keep Records Clear

simple, as a bill for material is usually made out for the extra work involved, and this of course is sent to the job. But in quite a number of instances it becomes mixed with the contract material without any means of afterward identifying it.

"We might say, however, that the foreman on the job is always instructed to keep the extra material separated from the contract material throughout the life of a job, if possible, but there are times when this is utterly impossible, regardless of the efforts of the foreman. When this state of affairs ex-

ists we usually make a complete inventory of the amount of material actually used on the job by checking it after the work has been installed. In about 75 percent of the cases the foreman does succeed in keeping the extra material separated from the contract material and upon completion of the work the foreman is charged with the duty of turning in the material slips for both branches of the work, thus enabling us to make a proper charge for extra material without difficulty."

Another contracting organization, the Lord Electric Company, New York, believes that the only way to keep extras separate from contract material is to check it up daily. It is their custom to have materials vouchered for daily and then signed for by the representative of the owner.

### Estimate Extras Closely

The system of the Sanborn Electric Company, Indianapolis, is to have as little returned material on extras as possible and the only way to accomplish this is by very close and expert estimating.

"Of course, if the extras are very large," the company writes, "we make a separate delivery of the material needed and charge this to the extra order. If the extra is small we use the material that is already on the work for the contract and make what we call a Material Transfer for this. When our form of material transfer slip is received in the office we credit the material to the contract job and charge it to the extra.

"We very seldom have returned material on these extras, as we endeavor to make the estimate of the material required as close as possible, but when material does have to be returned we make a material credit, transferring it back from the extra order to the contract.

"This places us in a position so that at the end of the work any material that is to come back is credited to the cost of the contract job alone and we think keeps the records more accurately."



# Pittsburgh and Des Moines Code Committee Reports

For the past year local Code Committees have been meeting under the national direction of A. Penn Denton, A. E. I. Code Chairman, and their reports as they filter through show how beneficial these Committees can be when functioning properly. Last month we presented reports from New Orleans and Kansas City and now we offer reports from Des Moines, Ia., and Pittsburgh, Pa. One thing is apparent from these reports, namely, that each Committee can choose its own method of attacking the local Code problem.—The Editor.

## Des Moines Getting Ready to Revise Ordinance

By R. Honegger, Chairman

In general the local committee is working very harmoniously here in Des Moines. Our Code has not been revised up to the present standard, but we anticipate that same will be completed within the next sixty days.

There remains some difference of opinion among the members on polarization of wiring, sealed service entrances and a few other items. In revising the local Code to conform to the National Code we are using our own arrangement and index on account of the fact that there are so many different interpretations of the National Code and also we find that same is not conveniently arranged to leave in the hands of workmen.

We have just closed a year of activity along these lines here in Des Moines. This is going to be a year of action along with activity.

## Pittsburgh Working on New Ordinance

By H. A. Calderwood, Chairman

The personnel of the Wiring and Code Committee of the Electric League of Pittsburgh represents as nearly as possible a cross-section of the electrical industry which is, I believe, the proper make-up of the ideal Local Code Committee.

The membership list is as follows:

George S. Barrows—Representing Electrical Contractors and Dealers.

Louis Tader—Representing Electrical Jobbers.

W. W. Johnston—Chief electrical inspector of the Board of Fire Underwriters of Allegheny County.

L. J. Kiefer—Representing Industrial Electrical Engineers.

C. J. Piroth—Representing Duquesne Light Company, public utility.

Benjamin Raphael—Representing Electrical Contractors.

H. A. Calderwood (Chairman)—Representing Electrical Manufacturers.

The persons named above are the regular members of the committee and are members of the electric league.

**T**HE Electrical Industry faces today its greatest responsibility to the American public. Every group within the industry must bear its part in this responsibility. The constant demand from some groups of our industry to lower National Electrical Code Standards must be met firmly with the resolve that in the sale of electrical service it will be safeguarded from the standpoint of adequate protection to the public from the fire and casualty hazard. I believe the Local Electrical Code Committee offers the industry a real opportunity if we measure up to our responsibility.—A. Penn Denton, National Code Committee Chairman.

For consultation in matters pertaining to the preparation of a new local electrical ordinance the following named persons co-operate with the league's committee:

Leffley H. Lee—Member of the Code Committee of the Local Electrical Contractors' Association.

J. J. Collins—Representing fixture dealers.

Louis Brandt—Architect, representing local Chapter of Architects and the Building Committee of the Chamber of Commerce of Pittsburgh.

Robert J. Cochrane—Superintendent Bureau Building Inspection, city of Pittsburgh.

Thomas Beckett—Chief electrical inspector, city of Pittsburgh.

R. W. E. Moore—Electrical engineer, Westinghouse Electric and Manufacturing Company.

George S. Law—Legal counsel, Westinghouse Electric and Manufacturing Company.

The last two gentlemen are special representatives appointed by the casualty and fire prevention committee of the Electrical Manufacturers' Council to act in the interests of the Uniform Ordinance, sort of "watching deputies."

The ordinance has been under consideration for about two years, during which time six or eight tentative drafts have been prepared and circulated for criticism. Plenty of time has been allowed each time for study and each one has been changed for some good reason.

We believe the last necessary revision has been made and it is about ready to be presented to the city council for approval. We are endeavoring to work close to the outline of the Uniform Ordinances and hope to be able to provide for the automatic adoption of the National Electrical Code when and, as revised from time to time, as the basic working rules, and have inserted very few special rules in the ordinance.

Briefly stated, the modifications of the National Electrical Code are:

(1) All metal construction except in dwellings for not more than two families and in all dwellings wiring in basements must be in metal.

(2) At least one switch must be provided in each room, hall, etc., near the entrance to same in all buildings.

(3) Outlets within reach of a person standing on a grounded surface as in basements or within reach of a person touching grounded objects as at kitchen sinks, bathroom fixtures, etc., must be controlled by a wall switch.

Other requirements of interest are that any person, firm, or corporation before receiving a permit to do wiring must "Register," prove a knowledge of the wiring rules or "Code" and pay a registration fee of \$50. This fee to be good for the current year and registration to be renewed annually as near to

(Continued on Page 29)

# Code Functions<sup>\*</sup>

## *Primarily Must Recognize or Fail to Recognize Suitable Wiring Methods, Restricting the Number for Reasons of Simplicity and Economy*

By W. J. CANADA,  
Electrical Field Secretary, National Fire Protection Association

IT MUST be clear that, with our civilization becoming so highly specialized, so entirely dependent on commerce across artificial jurisdictional boundaries and on interchange—ability of appliances, working methods and customs, among all jurisdictions—it is an economic crime to perpetrate adulterated codes with divergent provisions in different jurisdictions, upon the respective unsuspecting communities. And it is no less unsound, even though the community gives its consent, to vary rules, since such consent cannot be with clear understanding. In other words, it is out of the question for us to substitute for one consistent guide for wiring practice, everywhere, multitudes of divergent guides. Nobody really is today proposing this, but some divergencies do yet exist, and some are, unfortunately, still being added. All divergencies exact a serious toll in reduced safety, economy, convenience and harmony. We must undertake and are undertaking to narrow the field for such divergencies everywhere. No doubt the most effective way of narrowing this field for divergencies is by assuring the completeness, reasonableness and clarity of the code itself.

As a guide to practice adopted almost universally—the primary function of the code is clearly to recognize or to fail to recognize various types of wiring as suitable for use. Possible types of wiring are infinite in number. For simplicity and economy, as preached so successfully by Mr. Hoover, and for safety no less, the methods allowable should be restricted to relatively few in number. If the art does not automatically restrict the number of allowable methods the Code will do this. Practically, to some extent, the Code now functions in this manner. The Code no longer recognizes 25 amp. lighting cir-

cuits and fused rosettes as an allowable type of wiring. The Code today calls for all-metal wiring in garages holding more than two cars, also in theatres, in hazardous locations, etc. The Code today allows no open service switches in ordinary cases, though it has not yet similarly ruled on switches for control of motors and other devices requiring frequent operation. The Code allows no circuit above 7,500 volts in ordinary

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**B**BETTER electrical construction and uniform adherence to the Code are synonymous. Therefore the series of meetings recently inaugurated by Baltimore electrical men will be devoted to the study of the Code. These meetings are sponsored by practically every electrical interest in Baltimore and the first gathering took place recently, being signalized by the delivery of this talk by Mr. Canada.

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buildings. You may all have in mind other instances where the Code recognizes or fails to recognize types of wiring practice. You may feel that in some directions the Code has not gone far enough in this process of recognizing or failing to recognize practices. I raise the question for your latter consideration. "Is it not better for the Code to contain any necessary provisions of this kind rather than have such provisions grafted upon the Code by the inspection authorities in the several jurisdictions, and with divergence among these special rulings—whether these special rulings are issued in local bulletins or in local ordinance provisions?"

Another main function of the Code is to describe "how" recognized practices shall be carried out. Today the greater part of the Code is concerned with these "how" provisions. For instance, the Code provides how conduit

or open wires shall be run, how wires shall be fused, how switches shall be located in the circuits, etc. I raise the question regarding these "how" rules, "Is the Code now sufficiently clear and specific? Or if it appears necessary to specify more closely or interpret a general type of Code rule, in order to permit fair competition, to assure clear guidance to workers and to secure a common understanding by workers and inspectors—shall such interpretations be written into the Code itself, or shall they be grafted upon the Code by various local administrators as special local rulings in local bulletins or local ordinances?"

Another main function of the Code is to insure that only suitable materials, devices and fittings will be used in carrying out installation rules. Here the Code is saved much in length and unnecessary detail by specifying only broad types of materials and devices as required for a given character of wiring method and location, leaving the suitability of the particular material or device to the standards of the Underwriters Laboratories and its tests—this being a central testing laboratory where the suitability of devices for a given purpose can be reliably ascertained and one opinion rather than multitudes of conflicting opinions can be secured.

It now becomes desirable to permit you to get right down to the Code provisions individually, and see whether they do now fulfill their high purpose of an adequate guide to interior wiring practice. Before you proceed to do this may I suggest that whatever you may find in the Code that is apparently not yet wholly adequate, offers you an opportunity—not to suggest a divergent local requirement, but to do your part in the great work of keeping the Code where it now actually stands, the standard for interior wiring, by all the people, and for all the people. And I use

<sup>\*</sup> Excerpts from address on January 21st before Baltimore Electrical men who are making a study of Code.

Lincoln's words in support of popular government advisedly, in that where the daily life of so many people, so large a portion of their daily earnings and their daily comfort, depends upon electrical wiring practice, we need the benefit of all the suggestions in the one Code, by application of which all will benefit.

May I suggest that in addition to going through the Code to ascertain and remove any misunderstanding of Code scope and intent you also list and specially consider any of those cases where you cannot reach a common understanding, and where you agree that the Code is in some respect, however minor, inadequate to your local needs. And as criterions I would suggest your consideration of the following:

1. Does a particular rule accomplish what is apparently intended or does it fail through some ambiguity or some omission.
2. Does a particular rule convey different meanings to two competitors, or to a competitor and an administrator?
3. Does the entire Code lack guidance on an important matter, which you believe it should cover, or which you feel must be covered by some set of rules for interior wiring?
4. Do you feel that extension in labelling of suitable devices would be practicable and desirable from your standpoint and for what classes of devices?

### Price Maintenance

Editor, *The Electragist*:

Your article in the February issue (Shall the Price Slasher Be Legally Outlawed?) is interesting. To my mind the manufacturers themselves are to blame for this condition in allowing their products to be sold below their own advertised prices, a practice so injurious to the electrical trade that many retailers have, like myself, ceased handling certain goods. An article condemning this practice of the manufacturers might help more in correcting the evil than the forlorn hope of expecting legislation to govern resale prices. When we contract with a manufacturer to handle his goods, we have to agree to sell the article at a stipulated price. Why don't they demand the same of large department stores, mail order houses, etc.?

R. V. Bisbee,  
Phoenicia, N. Y.

## Progress of British Registration of Electrical Contractors

**H**IGHLY satisfactory progress with the National Register of Electrical Installation Contractors in England is reported in *The Electrical Review*, which cites the fact that up to December 31, 1925, a total of 930 contractors had applied for admittance to the Register. This is considered almost 50 percent of the entire number eligible.

While the British register operates in an entirely different manner from the Red Seal set-up in the United States, nevertheless its effect will be just as truly to raise the standards of installation in that country. The primary object of the plan is to serve the public who employ electrical contractors by providing a list of names of contractors who can be relied upon to uphold the highest standards of workmanship. For this reason contractors are in the minority on the Registration Board, the major portion of the personnel being nominated by various institutions representative of different sections of the industry that are, on the face of it, interested only in the advancement of the industry.

The working out of the scheme is interesting in that the Registration Board scrutinizes the qualifications of every candidate for registration. For this purpose the executive committee has the advantage of the co-operation of some 100 local advisory committees who can be relied on to report on the candidates' qualification from personal local knowledge. More of these committees are in course of formation and additional ones will be formed where required. These local advisory committees each consist of three members, one representing the Institution of Electrical Engineers, another the electricity supply section (central stations) of the industry and the third member is a Registered Contractor. The assistance of these advisory committees has undoubtedly operated, it is stated, to the advantage of bona fide electrical contractors.

The situation which brought the National Register into being, is much like that which exists in the United States at present. Rapid expansion of the building industry has brought into prominence the "jerryman" or irresponsible contractor who, without any business establishment or resources, undertakes residence installations on a purely speculative basis. Generally in

order to get the business, the prices quoted by this type of contractor have been so low as not to permit of proper workmanship or material being employed. The National Register endeavors to distinguish between such undesirable speculators and the genuine electrical contractor.

Instances of the advantages of Registration for individual contractors have already been noted. Many public bodies are so satisfied of the reliability of its members that they have signified their intention of confining installation contracts to registered contractors.

### Pittsburgh and Des Moines Code Committee Reports

(Continued from Page 27)

the calendar date of January 1 as possible, fee for re-registration to be \$5.

This is not a true license system, as there are no provisions for classification for an examining board or for cancellation of the registration. It is simply a means for identifying the applicant and obtaining a reasonable assurance of responsibility and ability.

A unique feature, worthy of imitation, is the requirement that the chief electrical inspector shall become a member of the Association of Electrical Inspectors to which he may be eligible, shall attend meetings when possible and shall serve on committees on which he may be appointed, all necessary expenses to be paid by the city. We do not know whether this is legal or not, but we put it in under the head of "Duties of the Inspector" and hope it will stand fire. The city inspector approves it.

Another requirement is that the chief inspector shall maintain for reference a card file record of inspected electrical appliances and shall keep it up to date.

There has been a splendid spirit of co-operation between all parties and City Inspector Beckett has expressed a willingness to have the Code Committee act as a committee board or arbitration board in cases of disputed interpretation of the Code.

In addition to preparing the ordinance the League Wiring and Code Committee drafted the local Red Seal specifications.

### George Weideman, Brooklyn

TO anyone who is familiar enough with electrical contracting to know a switchboard from a piece of conduit, the name of George Weideman stands as representing the best there is in the field. It has meant that ever since 1891 when Mr. Weideman laid the foundations of the firm that bears his name. He was born in 1864 in New York City and educated in the public schools there, graduating in 1878. At the age of fourteen years he entered the employ of the Western Union Telegraph Company which then constituted about all there was of the electrical industry. He continued with the company for ten years. Sometime during this period he found time to become an expert in such technical electrical matters as were known then and also to develop an unusual amount of business acumen. Both of these qualifications were handy tools when he struck out for himself in 1891 to build up a business of installing light and power systems in industrial plants. He operated first under his own name and later the firm became Weideman & Conkling. In 1907 he incorporated the business as the George Weideman Electric Company and two years later branched out by establishing a factory for the manufacture of electrical appliances. A large proportion of the company's work still consists of industrial installations. Mr. Weideman is a life member of the New York Electrical Society, the oldest electrical association in the country, a member of the A. I. E. E., the N. E. L. A., the I. E. S., the Rotary Club, the Brooklyn Engineers Club and a number of civic organizations.



## Electragists You Should Know



### Sylvan M. Byck, Savannah

IT would be hard to walk a block in the business section of Savannah, Georgia, without seeing some important building that boasted of an electrical installation put in by the Byck Electric Company. Though the company was established in Savannah only shortly after the World War, the initiative and business sense of its president, Sylvan M. Byck, have made it one of the best known electrical construction firms in the South. Mr. Byck started in the electrical contracting business prior to the war, but he left it in a hurry when this country entered the conflict, enlisting in the Regular Army. He was assigned to the Electrical School at Fortress Monroe, being in the Heavy Artillery, and he still retains his commission as Lieutenant. When peace was declared he went to Waycross, Ga., and after being there awhile opened headquarters in Savannah. Since then he has handled many of the largest wiring jobs in Georgia and Florida and in addition has built up the merchandising end of his business to the point where it demanded new quarters and the result is a new store, one of the South's finest. In April, 1925, Mr. Byck opened an office in Tampa, Florida, and has handled many jobs on the West Coast of that state. Of late he has been very active in the development of Savannah, having helped to organize two large realty firms, being president of one and vice president of another. He is a director in the Savannah Builders' Exchange, a member of the Rotary Club and a member of the board of directors of the Harmonie Club.

# Is the Contractor Liable for a Dealer's Tax?

*A Court Decision Is Presented Here Which Tends to Clarify the Question of What Business Taxes a Contractor Should and Should Not Have to Pay*

STATE laws providing for a tax on business done by merchants seem to be an occasion of some confusion to the contractor-dealers in several states, notably Virginia and Pennsylvania, because of the fact that such laws may be interpreted as forcing a contractor-dealer to pay a merchandising tax upon the contractor part of his business.

It would be manifestly unfair to penalize the contractor who merchandises, in favor of the contractor who does not and therefore is not subject to a merchant tax. But this seems to be the situation in Virginia, for a correspondent writes as follows:

"In the state of Virginia, and in Lynchburg, an electrical contractor and dealer is required to take out a contractor's license and also a merchant's license to conduct retail business. In making out our tax report for the state our taxes are based on the amount of merchandise bought, which constitutes our merchant's license. We have been advised by our lawyer that there is no distinction made as far as merchandise which is bought and used in the contracting department. It does not seem to us that it is fair that we should pay a merchant's license for material bought and used under our contractor's license, but there seems no way around this except getting our state legislature to amend certain articles."

## Basis of Taxes

At the request of the writer THE ELECTRICIST has made an investigation, finding that the State of Pennsylvania has a somewhat similar law, differing from the Virginia statute by the provision that the tax shall be based on amount of merchandise sold. Even this was misinterpreted until recently, contractor-dealers having to pay on all merchandise sold whether labor was added to it or not. However, a recent decision of the Supreme Court of Pennsylvania

has cleared up the subject. The ruling was in the case of the State of Pennsylvania against James H. Lutz, a plumber, and reads in part as follows:

"In this case we have presented the question whether a plumber is liable for the payment of the mercantile license tax imposed by the Act of May 2, 1899, P. L. 184, and, if he is, does liability attach to the entire volume of the business which he transacts or to only part of it?

## Division of Business

"Defendant is a registered or license master plumber. Under the agreed upon facts his business divides itself into three branches (1) that relating to contracts which he performs, wherein he furnishes materials and labor, (2) jobbing or repairing, in which the like situation exists, (3) the sale of materials purchased from others, upon which he expends labor.

"Defendant contends that he is not a dealer, and, therefore, not subject to the mercantile license tax so far as the first two branches are concerned . . . and as to the third, that the gross volume of his business for the year in question amounted to only \$359.62 as to which he is exempt under the terms of the Act of April 9, 1870, P. L. 59, which stipulates 'That hereafter manufacturers and mechanics who shall sell goods, wares or merchandise, other than their own manufacture, not exceeding the sum or value of five hundred dollars per annum, shall not be classified or required to pay any annual tax or license fee; but if such sales exceed the sum or value of five hundred dollars per annum, as aforesaid, they shall be classified in the same manner, and required to pay the same annual tax as is now required to be paid by dealers in foreign merchandise.' He also contends that if he be a dealer within the meaning of the Act of 1899, he is never-

theless exempt under the exceptions contained in Section 10 of the Act of May 4, 1841, P. L. 307, and the proviso contained in Section 11 of the Act of April 22, 1846, P. L. 486, as amended by the Act of February 27, 1868, P. L. 43.

"As to the first and second branches of defendant's business, our conclusion is that he is not liable to pay a mercantile license tax thereon. Plumbers and like artisans and craftsmen such as carpenters, bricklayers, stone masons, plasterers, etc., who contract to furnish labor and materials for an undertaking, either in its construction in the first instance, or its alteration or repair, are not within the scope of the mercantile tax act and are not comprehended within the term dealers, who are the persons from whom that particular impost is collectable. Such a craftsman in the language of Mr. Justice Black (Norris Bros. v. Com, 27 Pa. 494; see also Com v. Lowry-Rodgers Co., 279 Pa. 361) is not a dealer because he is 'not one who buys to sell again' in the sense in which merchants buy to sell. In Com. v. Gormly, 173 Pa. 586, we reached the determination that a plumber was not liable for a mercantile license tax where he had no store or other place at which he did business as a buyer and seller. There is nothing in the Act of 1899 which would embrace within its terms a master or licensed plumber so far as the contract and jobbing or repair features of his business are concerned and the court below was correct in so determining. . . .

## When Acting as Dealer

"As to the third branch of defendant's business, where he sells material just as any ordinary dealer would, we are of opinion that he is liable for the tax, unless the Act of April 9, 1870, P. L. 59, relieves him, and we think that it does not. That act is no longer in

effect, having been repealed by the general mercantile license tax act of 1899, which is a comprehensive enactment, wherein the legislature undertook to revise the whole subject of mercantile taxes and which makes subject to the tax 'each retail vender of or retail dealer in goods, wares and merchandise' without exemption of any kind and which repeals 'all acts or parts of acts general, special or local inconsistent herewith,' of which the Act of 1870 was one.

"Our determination, therefore, must be that as to the third branch of his business in which the gross volume of sales for the year in question amounted to \$359.62, the defendant is liable for a mercantile license tax and the court erred in concluding otherwise."

It would appear from this that where such mercantile taxes exist or are proposed the only provision protecting a contractor-dealer is a clause basing the tax on amount of merchandise sold, not the amount bought.

The last part of the above decision, that relating to the sale of material purchased from others on which a contractor expends no labor, is interesting, but somewhat limited in its application to the electrical contracting field. An instance might be the sale of fixtures to a customer, who, after that transaction was consummated, contracted with the contractor to have them installed. In that case, the contractor would be taxed on the sale of the fixtures, but not on their installation.

### The Building Triangle

"The Owner, the Architect and the Contractor form a triangle (eternal or otherwise) each part of which is essential to the other and in which the Architect, commissioned by the Owner, is intermediary between Owner and Contractor, and of necessity must come into close contact with each; he can serve the Owner's interests much better by knowing and being friendly with reliable contractors, rather than by maintaining a high and mighty position, wherein the Contractor is looked down upon as only a subordinate to be given orders. It is well for an architect to give praise when it is due and to boost the man who executes his work faithfully, honestly and with dispatch, and with the least amount of trouble."

Joseph C. Huber, Jr.,  
President, Art Crafts Association.

### Four Factors in Electrical Fires

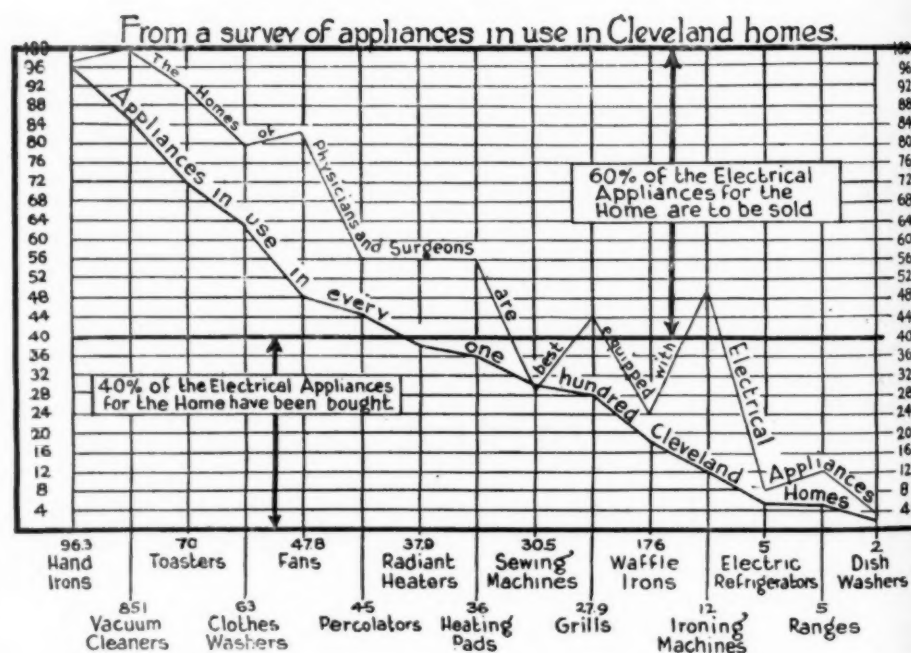
There are four great contributing factors to the electrical fire hazards, according to James S. Mahan, manager of the electrical department of the Western Actuarial Bureau, who listed them in a recent talk before the fire prevention school of a local Chamber of Commerce as: Defective and poor material, poor installation, inadequate supervision and carelessness. And carelessness he held was the greatest of these. The defective and poor materials usually originate, according to Mr. Mahan's talk as reported by the *Kentucky Fire Chief*, at special sales in department stores, drug stores, five and ten cent stores and low grade mail order houses, and are the source of many electrical fires and of many fires of so-called unknown origin. Poor installations are the work of incompetent or mis-instructed mechanics or of strict orders by the contractor to the workman to shirk his work

and to skimp on material. This is being reduced by the more adequate supervision of electrical work, but there is still great need for improvement along this line. Proper inspection involves inspection of the installation while the work is going on and at its completion, with at least an annual inspection thereafter by a competent man qualified to judge electrical hazards.

There are many forms of carelessness, the most serious being the use of fuse plugs of too high a rated capacity or tampering with fuse plugs by using pennies or other metal pieces back of them. The fuse is the safety valve of the electrical system and should not be tampered with any more than should the safety valve of the boiler or the relief valve of an air compressor.

Use of wires and cords unsuited for the practical requirements is another common source of electrical hazards, as is the placing of combustible materials on or against electric light globes.

## A Cross Section of the Electrical Market



RECENTLY the Electrical League of Cleveland made a survey throughout its territory to find out how many electrical appliances were in use in the homes of the city. Two thousand survey cards were distributed in lots of 200 to newspaper employees, department store employees, factory office employees, bank employees, factory employees, central station employees, at-

torneys, physicians and surgeons and exhibit visitors. In addition to this a check was made on homes renting from \$25 to \$130 a month. The accompanying chart was prepared from the results of the survey. It shows that dishwashers are found only in 2 percent of the homes, while electric hand irons were found in 96 percent with varying percentages of the other appliances.

# Some Bids Are "Busts"

**Here is a Contractor Who Does Not Go After All the Business in Town. In Fact, He Likes to Have the Sort of Work He is Looking For Come to Him**

By E. C. HEADRICK

PROBABLY I would be as quick as any other electrical contractor-dealer to resent the suggestion that I am either slow or over-cautious in my attitude toward new business. None of us can afford to overlook the fact that these are days of keen competition but, in my mind, there is certainly a stage in the quest for new jobs where the sensible contractor can sensibly withdraw from any competitive proposition. Some bid jobs are "busts," you know.

There is a variety of builder who always goes bargain hunting when he has contract work to distribute. We are all familiar with his kind—he delights in getting a crowd of contractors bidding against each other, and, for the life of him, he never seems to learn that sawed-off prices result in hammered-down quality of work.

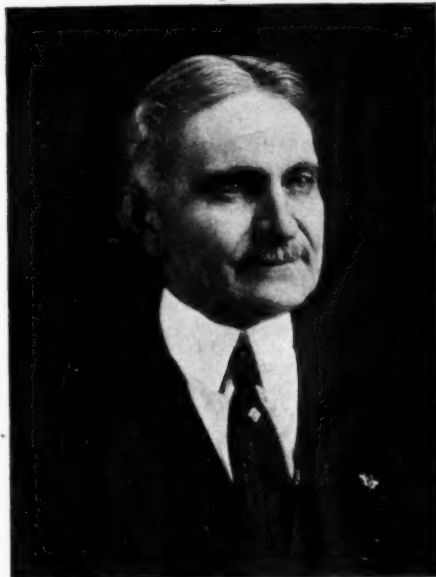
Most of us have seen cases where competitive bidding has become so rabid that John Smith really gets fighting mad on the subject of some special job and determines to get that work away from Bill Jones even if he doesn't "make a cent out of it." Usually, if John is finally unfortunate enough to land the contract, he gets it on just that basis—he can not possibly make a cent out of it. But the job he has, and the job he must see through. He has made one of those "bust" bids.

The chances are that, with the heat of battle over, John finds that he shaved his estimate prices uncomfortably thin when he figured his bid. Then, too, he tells himself that, after all, he isn't in business for his health and something must be done so he can come out of his contract alive.

Well, what he does to "get out alive" is the oldest story in the contract world. He shaves a dollar off one end of the work and whittles a few more off in the middle and at the other end. Then his estimate on equipment gets a little attention from the pruning knife—and so it goes. John Smith finally gets out

alive and the builder gets something he didn't expect in the wiring line.

There you have a theoretical picture of a certain kind of competition. It is going on in the contractor-dealer field every day and it is the sort of thing I



E. C. Headrick, owner of the Headrick Electric Company, Denver, was recently interviewed by an Electragist representative on the subject of "bid" business. Mr. Headrick has some very definite ideas on the subject and they are loaded with good, practical sense—the kind of knowledge that is not learned over-night by any contractor. This contractor has been successful in Denver and here he gives a few of the reasons why he is one of the leaders of the industry in that city.—The Editor.

fight shy of because it would not only hurt my business, but wouldn't show any profit.

Personally, I would rather have one customer who hunts me up for a bid than a half dozen I can win out of a bidding shindy. If one wants to get and carry along a reputation for good work and wishes at the same time to

make a little money it is a good plan to keep away from any bid jobs except those that call for quality work.

It may be a good deal of a platitude, but it is money-making truth, that only the best work brings repeat business and makes boosters out of your steady customers. I'm ready to admit that when someone comes in with new business and says he was sent by one of my old clients, well, I get the same grand and glorious feeling the artist in the funny strip tells about.

I have found it a good plan to specialize in a way on repair work and rewiring. As a result, business of that sort comes in more or less unsolicited because I have aimed at a reputation for being "good" at that variety of contract work. Incidentally, there is far less bidding on that work and neither the owners nor I run chances of bad breaks on the price end of such jobs.

Of course, I welcome a try at some big job on a new building. But, when it is a bidding proposition, my slip usually goes in on a labor plus material basis and if the builder is wise he knows he can't lose that way.

As I say, some bid jobs are "busts" and most of them are gambles, more or less. It is a wise contractor-dealer who knows which will come up next, red or black, I mean, on his ledgers.

## N. E. L. A. Report on Commercial Cooking

"Sales Plans for Commercial Cooking" is the title of the report just published by the power committee of the Commercial Section of the National Electric Light Association. The report is issued as a serial that it may be available now instead of being delayed until this year's convention. The report takes up the question of analyzing the market, the classification of prospects and various aspects of sales promotion of commercial cooking devices.

# *The Electricist*

Official Journal of the  
Association of Electricists—International

S. B. WILLIAMS  
Editor

H. H. STINSON  
Associate Editor

## Still No Final Decision

For the first time since the National Electrical Code became an American Engineering Standard there has come a division of opinion as to Code revision. The Electrical Committee while casting a two-thirds vote in favor of broad rules governing the installation of unarmored assemblies, was unable to make it unanimous and as a result a majority and minority report will accompany the vote to the sponsor body and if necessary on up to the American Engineering Standards Committee.

The rules which received two-thirds of the votes of those present were the Article V Committee minority report. The committee's majority report was presented but the minority report was at once offered as an amendment and upon receiving a favorable vote placed the article committee's majority recommendations in the position of having no standing.

With two sides tied up, one in favor of very liberal rules and the other equally desirous of seeing certain limitations put upon the use of the material, the result is that the matter is still far from being settled.

The American Engineering Standards Committee procedure purposely is such that a standard cannot be jammed through. When there is a difference of opinion it is obvious that some time must elapse before an American Standard can be proclaimed on that point.

It of course will have a very important effect upon future Code revisions because probably no majority in the future will ever permit a subject to be left unsettled until every conciliatory effort has been made. Strong minorities have a very important part in American Engineering Standards practice.

In the meantime not only the manufacturer has to mark time but the industry as well. It would seem as though there ought to be some shorter process by which a new development could be accepted or rejected without so much rigamarole.

If every new development had to be subjected to so many hearings, test and red tape as has RomeX it wouldn't be long before bootlegging of electrical materials would be a most popular business.

There must be a procedure set up that assures a fair and entirely disinterested judgment. We will continually be having new developments submitted for approval under

suitable rules of installation. We must find some way of making decisions quicker and with more finality.

## A Chance to Make a Fortune

What is the solution to the fuse abuse problem? The industry has made rules for the proper fusing of conductors but the industry cannot police every installation continuously. Original installations are in conformity to local ordinances, but the problem is to keep them so.

While there is a certain amount of tampering with main line fuses the principal trouble is from improper branch circuit fusing. Main line fuses ought to be sealed and where this is done the trouble from this source is greatly reduced. Where there is tampering the meter reader should be able to detect it on his next visit.

One cannot tell, however, whether or not the branch circuit fusing is proper except by investigating each fuse. The shape of the window is a protection only against size and not against pennies and bridges.

A number of people are known to be working on fuse designs and there are some who are advocating circuit breakers.

If a fuse of a different design is to replace the present plug fuse it must be so made that it can be adapted to the cut-out now in use. It must be penny-proof, bridge proof and so constructed that one cannot readily substitute a larger size fuse.

Fame and fortune awaits the man who discovers the answer. Who will it be? What will it be?

## Inspection Association Membership

An interesting feature of the electrical ordinance of Huron, S. D., recently passed, is a clause requiring the head of the electrical inspection department to be a member of his national associations and authorizing him to engage in the committee work of such associations if appointed on committees, the electrical bureau to pay all expenses.

This strikes us as being a very wise provision. How is an electrical inspector to broaden himself unless he has the opportunity to meet with other men doing similar work?

Electrical inspectors are not men of large means and

income. To have to pay their own expenses to such meetings is very frequently a burden that cannot be carried.

There is one place in the Middle West where the local electrical industry pays the expenses of its municipal inspector to the Western Association meetings. This shows that the electrical industry in that city knows that it benefits by the education of its inspector. There is no city in the country which would not benefit if its inspector had a similar opportunity.

The electrical contractors are urged to bear this in mind the next time their local ordinance is revised. In making any such provision for expenses for association work care should be taken, however, not to make the wording so broad as to give an opportunity for "junketing." This is not to be taken as a criticism against electrical inspectors but it must be remembered that there are other inspection departments which may claim equal privileges and then other inspectors have been known at times to abuse similar privileges.

### Lifeless Associations

Why are so many state associations of electrical contractors and dealers floundering about so aimlessly? Of all such bodies but a few seem to be accomplishing anything.

There is only one way in which any association can succeed and that is by having something to do and doing it. It will be found that those associations which are lifeless have little or no conception of their opportunity.

An association which is kept alive purely for the sake of an association, but without any real constructive purpose is wasting time and money without doing any good.

### Qualifications for Foremen

Many a good wireman has been spoiled by making him a foreman. The practice of giving one's best mechanics the job of supervising the work of others is not always sound.

A foreman is the employer's representative on the job. He must see that the wiring is installed in a workmanlike manner according to the plans and specifications; he must see that the work is done with the least waste of labor and materials; he must protect the interests of the employer and be able to satisfy the customer. A foreman in other words must be capable of assuming responsibility.

In choosing a man for the job of foreman there are other things of far greater importance than the individual's ability with his tools. In the first place, a foreman must be able to command the respect of the men under him, not by force but by his own personality. A foreman must have tact, because he comes in frequent contact with the customer whom he must satisfy without hurting his employer's interests. He must be able to make a decision quickly; considerable productive time can be lost by a foreman's indecision. He must be able to lay out work and keep records.

These are the major qualifications for a good foreman. If a man be deficient in any one of them his employer will

be at a disadvantage. One of the greatest leaks in the contracting business comes through poor foremanship. If the contractors would pick men for the foreman's job who had the proper qualifications rather than their best mechanics they would get better results.

### In Another Six Months

The opinion of authorities seems to be unanimous that the peak of the building prosperity will come during the first half of this year. If that be true it behooves the electrical construction industry to gird its loins against the succeeding period of "dog eat dog."

There will be plenty of business but as the peak passes the architects will be found to be a little more difficult to do business with. Construction companies will begin to find themselves with room for more work and they will go out and take it at "keeping the organization together prices."

We therefore suggest two things—

1—Make your own operation so efficient that you can take jobs at the other fellow's price without losing money, and

2—Do work of such quality that the architect will be willing to give you the job at the other fellow's price and not insist that you beat his bid.

There will be contractors who will pull through a period of strong competition unweakened because they know how to keep down losses due to non-productive labor on the job and in the office. The contractor who loses out is the man who has not learned the value of business management.

### The Bald-Headed Barber

The story of the bald-headed barber who tries to sell his customers a liquid guaranteed to grow hair is too well known for further comment except to say that it finds a parallel in the electrical industry.

Elsewhere in this issue there is described an elaborate window-lighting installation put in his own store window by a Brooklyn contractor. He wanted to push window-lighting business and it seemed to him it would be easier to sell such installations if he had one of his own to show. On another page is a letter from a leader in the industry out on the Pacific Coast, suggesting that before the electrical contractor try to get over to his customers the idea of the Red Seal home, it might be well to see that his own home at least approached Red Seal standards. It is easier to sell a man by the use of a concrete example than by the preparation of a dozen blue prints and estimates.

How many electrical contractors have well-lighted stores and windows? How many have homes completely or even fairly well electrically equipped and wired? The poet had the answer when he said, "Tell me not in mournful numbers."

The electrical contractor-dealer joins the bald-headed barber in the hall of fame when he tries to sell his public something he evidently doesn't believe good enough to try himself.

## Association of Electragists INTERNATIONAL

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James R. Strong .....1905-1908  
Gerry M. Sanborn .....1908-1910

\*Marshall L. Barnes .....1910-1912  
Ernest Freeman .....1912-1914  
\*Deceased

John R. Galloway .....1914-1916  
Robley S. Stearnes .....1916-1918  
W. Creighton Peet .....1918-1920  
James R. Strong .....1920-1925

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<b>ARKANSAS</b>			(Asbury Park and Red Bank)		435 Orange Street
Fort Smith (C) .....	Edward Ryan	Ft. Smith Lt. & Trac. Co.	Newark (C) .....	Paul H. Jaehnig	106 Academy St.
<b>CALIFORNIA</b>			Paterson (C) .....	R. Marshall	
Fresno (C) .....	Clyde L. Smith	1162 Broadway	Philipsburg (See Lehigh Valley, Pa.)		
Long Beach (L) .....	V. Ringle	So. Cal. Edison Co.	<b>NEW YORK</b>		
Los Angeles (C) .....	Helen I. Mikesell	1009 1/2 S. Hill St.	Buffalo (L) .....	W. R. Prosser	87 W. Tupper St.
Oakland (C) .....	Laurence R. Chilcote	Hobart & Webster Sts.	Brooklyn (C) .....	H. F. Walcott	60 Third Avenue
Sacramento .....	L. W. Sherman	910 Ninth Street	Jamestown (C) .....	Henry M. Lund	309 Main Street
San Francisco (C) .....	E. E. Browne	522 Call Building	Nassau-Suffolk (C) .....	Henry T. Hobby	55 Front Street, Rockville Centre, L. I.
Beverly Hills (C) .....	H. Barker	Beverly Hills			
Santa Ana (C) .....	O. W. Robertson	303 N. Main St.			
<b>COLORADO</b>					
Colorado Springs (C) .....	Matt Whitney	208 N. Tejon St.	New York City	M. J. Levy	70 East 45th Street
Denver (C) .....	E. A. Scott	615 Fifteenth Street	Section No. 1 (C) .....	Albert A. A. Tuna	127 East 34th Street
Pueblo (C) .....	E. F. Stone	So. Colorado Power Co.	Independent (C) .....	George W. Neil	96 Beekman St.
<b>CONNECTICUT</b>			Metropolitan (C) .....	E. M. King	515 Niagara Street
Hartford (C) .....	A. A. Angello	473 Park Street	Niagara Falls (C) .....	Theo. T. Benz	278 State Street
Waterbury (C) .....	D. B. Neth	107 West Main Street	Rochester (C) .....	Richard Spengler	421 McClellan Street
			Schenectady (C) .....	Fred P. Edinger	802 East Water St.
<b>DIST. OF COLUMBIA</b>			Syracuse (C) .....	W. C. Balda	228 Genesee Street
Washington (L) .....	P. A. Davis	1328 Bye St., N. W.	Utica (C) .....	Louis Mayer	485 South Broadway
<b>FLORIDA</b>			Yonkers (C) .....		
Jacksonville (C) .....	W. H. Secrist	c/o Bay-Secrist Elec. Co.	<b>OHIO</b>		
Miami (C) .....	E. A. Robinson	118 N. W. First Ave.	Akron (C) .....	E. C. Rishel	540 East Avenue
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Electrical Contractors' Association .....	J. W. Collins	160 No. LaSalle St.	Massillon (C) .....	F. D. Mossop	c-o Mesco Electric Co.
Master Elec. Contractors' Association .....	F. J. Boyle	175 W. Washington St.	<b>OKLAHOMA</b>		
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Granite City (C) .....	M. E. Kilpatrick	Nildingham & State Sts.	Bethlehem		
<b>INDIANA</b>			(See Lehigh Valley) ..		
Gary (C) .....	A. B. Harris	570 W. Washington St.	Catasqua		
Indianapolis (L) .....	R. E. Snyder	704 No. Alabama St.	(See Lehigh Valley) ..		
Michigan City (C) .....	Walter A. Sassodeck	913 Franklin St.	Chester (C) .....	W. H. McMillan	12 West Third Street
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Terre Haute (C) .....	C. N. Chess	523 Ohio Street	Erie (C) .....	R. D. Goff	11th and French Sts.
<b>IOWA</b>			Easton		
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Davenport (C) .....	Louis F. Cory	510 Brady Street	East Stroudsburg		
Fort Dodge (C) .....	J. A. Paul	16 South 12th Street	(See Lehigh Valley) ..		
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Louisville (C) .....	C. L. W. Daubert	921 South Third St.	(See Lehigh Valley) ..		
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Shreveport (C) .....	R. L. Norton	620 Marshal Street	Pittsburgh (C) .....	Fred Rebele	1404 Commonwealth Bld.
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Haverhill (C) .....	H. W. Porter	14 West Street	Providence (C) .....	J. P. Connolly	141 Meeting Street
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Springfield (C) .....	A. R. Tullock	11-12 Court House Place	Charleston (L) .....		
Worcester (L) .....	John W. Coghlin	259 Main Street	<b>SOUTH DAKOTA</b>		
<b>MICHIGAN</b>			Sioux Falls	H. W. Claus	326 S. Phillips Ave.
Detroit (C) .....	N. J. Biddle	112 Madison Ave.	<b>TENNESSEE</b>		
Grand Rapids (C) .....	T. J. Haven	1118 Wealthy St., S.E.	Chattanooga (L) .....	P. W. Curtis	725 Walnut Street
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<b>MINNESOTA</b>			Memphis (L) .....	J. J. Brennan	12-16 So. Second St.
Duluth (L) .....	Morris Braden	c-o Minn. Power & Light Co.	Nashville (C) .....	J. T. Shannon	c-o Electric Equip. Co.
Mineapolis (C) .....	W. I. Gray	209 Globe Building	<b>TEXAS</b>		
<b>MISSOURI</b>			Beaumont (C) .....	J. A. Solleder	Houston & Bolivar Sta.
Kansas City (C) .....	A. S. Morgan	4 E. Forty-third St.	Dallas (C) .....	P. B. Seastrunk	2032 Commerce St.
St. Louis	W. F. Gersner	120 No. Second St.	Houston (C) .....	J. W. Read	715 Capitol Avenue
Electragists' Ass'n (C)	G. L. Gump	Wainwright Bldg.	<b>UTAH</b>		
Electric Employers' Association (C) .....			Ogden	B. Kristofferson	2249 Washington Ave.
<b>NEBRASKA</b>			Salt Lake City (C) .....	C. Louis Collins	215 Kearns Bldg.
Lincoln (L) .....	George Ludden	1329 N Street	<b>VIRGINIA</b>		
Omaha (L) .....	C. W. Brown	Omaha Builders Exch.	Lynchburg (C) .....	J. L. Fennell	c-o Fennell & App
			Norfolk (L) .....	A. W. Cornick	200 Plum St.
			Richmond (C) .....	E. M. Andrews	15 N. 12th Street
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			Seattle (L) .....	P. L. Hoadley	Seaboard Building
			Spokane (C) .....	William Stack	W. 1121 Cleveland St.
			<b>WISCONSIN</b>		
			Green Bay (C) .....	V. E. Grebel	531 S. Broadway
			Madison (C) .....	Otto Harloff	602 State Street
			Milwaukee (C) .....	R. H. Grobe	1604 Wells Street
			Racine (C) .....	William Larsen	1430 Junction Ave.
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			Montreal (C) .....	George C. L. Brassart	674 Girouard Ave.
			Toronto (C) .....	M. McRay	24 Adelaide St., N.E.
			Vancouver (C) .....	J. C. Reston	579 Howe St.
			Winnipeg (C) .....	Fred Ball	300 Princess St.

(C) designates exclusively Contractor-Dealer organization.  
(L) designates an Electrical League.

# FEBRUARY ACTIVITIES

## Large Attendance at Three-Day Florida Meeting

A CONVENTION, unique in the annals of state associations in that it not only had a very large attendance, but drew that attendance from many parts of the country, was held by the Florida Association of Electragists at Orlando, February 16, 17 and 18. There was a total registration of 172, of which 90 were contractors, 36 were representatives of jobbers and 46 were representatives of manufacturers. In addition there were a number of visitors on the last day of the meeting who failed to register and these brought the attendance into the neighborhood of 200.

The contractor group represented thirty-one cities in Florida, while the jobber and manufacturer representatives hailed from practically all sections of the country. The meeting was signalized also by the attendance of Joseph A. Fowler, president of the Association of Electragists, International.

The first business sessions of the convention were held on Tuesday and were opened by an address of welcome from Mayor Autrey of Orlando. Preston Ayers, president of the state association, presided and introduced Mr. Fowler. After this came the re-election of T. E. Satchwell, Jacksonville, as executive committeeman for three years and that of Charles E. "Jesse" James as secretary for two years.

At the afternoon session Arthur P. Peterson, field representative of the A. E. I., gave a talk on estimating, Samuel Adams Chase, Westinghouse Electric and Manufacturing Company, spoke on "The Convenience of a Properly Wired Home" and Mr. Fowler outlined in a talk the progress being made by the A. E. I.

One of the interesting features of Mr. Fowler's talk was his introduction of Thomas Hatfield, Hatfield Electric Co., Indianapolis, and his announcement that the Hatfield company had discontinued the jobbing part of its business and would hereafter stick solely to contracting, in line with the A. E. I. Trade Policy.

A Manufacturers' Exhibit occupied the attention of the meeting the following day and attracted a large attendance from the general public as well as of those in attendance at the convention. During the exhibit there were talks by manufacturers' representatives on new materials being brought out.

A golf tournament for the delegates and guests was held on the morning of the last day with over fifty entries. The first prize went to John Graham, Winter Park; the second to C. J. Manderville, Orlando and the third to George Van Dusen, Daytona Beach. The meeting wound up with the annual banquet that night, Mr. Fowler being the toastmaster and Tom Bibber and "Bony" Atkinson staging an entertainment that kept the banqueters in high good humor from start to finish.

Between business sessions the visitors were kept busy by an entertainment program, lavish in its conception and execution. It included dances, auto rides, and bridge parties and a matinee party for the women guests, the program costing the state and the local Orlando association \$600 apiece.

## Colorado State Gathering for March

Denver will be the scene of a meeting of electrical men from all points in Colorado on March 26, according to the plans announced by the Electrical League. The meeting will be a one-day affair intended for business, with entertainment in the background, and is designed to be a starting point from which the electrical interests of the entire state can go forward as a body.

The program will include several speakers of national prominence and will probably be staged at the Albany Hotel. It will be particularly designed for the interest and support of contractor-dealers and a committee has been appointed by the Contractors' Association of Denver to work with the

program committee in formulating plans. The Denver contractors will entertain all the out-of-town contractors as their guests at a luncheon meeting and it is hoped to bring about a state organization of contractor-dealers.

## Co-Operative Medal to J. R. Crouse

To J. Robert Crouse, father of co-operation in the electrical industry, was awarded the 1925 McGraw medal for co-operation in recognition of his efforts in organizing the electrical refrigerator manufacturers for co-operative market development. The medal and purse were awarded at a banquet held in New York on February 8 under the auspices of the Society for Electrical Development.

More than 200 leaders from every branch of the electrical industry attended the banquet. Addresses were made by H. L. Doherty and Guy E. Tripp, chairman of the board, Westinghouse Electric & Manufacturing Company. The presentation was made by Earle E. Whitehorne, commercial editor, Electrical World.

There were also three citations of honorable mention which went to George W. Austin, Toronto, for his Red Seal work; Clyde L. Chamblin, president, California Electrical Construction Company, for co-operative effort on the Pacific Coast, and to John J. Caddigan, Edison Electric Illuminating Company of Boston, for his community electrical show idea.

## South Dakota Electragists Quarterly Convention

Almost every member was present at the quarterly meeting of the South Dakota Association of Electragists held on February 3 at Mitchell. The morning was given over to reports of the general committees and the afternoon was taken up by a talk by S. B. Williams, editor of THE ELECTRAGIST.

A drive will be made to double the membership. The cost data committee recommended that the next meeting

make a study of members' costs and estimating methods.

A study is being made of state licensing laws under the direction of the legislation committee. The association hopes to be able to secure the enactment of a state law soon.

The trade policy committee reported excellent conditions except for one concern which does a combination contracting and jobbing business at very low construction cost. It was the opinion that this concern's jobbing business would not survive if it continued to use its wholesale advantage in the contracting business.

The association was the guest of the Mitchell Electragists at a regular luncheon of the local Kiwanis Club.

### Safety Conference Accomplishments

The 1925 activities of the Electrical Safety Conference were reported on at the conference held in New York on January 20, the work of the committees on panelboards, enclosed switches and rotating electrical machinery being specifically mentioned.

The committee on panelboards, it was reported, has completed its work in the preparation of a safety standard and this standard has been printed and distributed.

The committee on enclosed switches has completed work on a safety standard. This standard will shortly be referred to the co-operating organizations for ratification.

The committee on rotating electrical machinery has completed work in the preparation of a safety standard for portable electrical devices and, following agreement upon several minor details referred back to the committee, this standard will be submitted to the members of the conference for final action.

### Northern Ohio Contractors Organize

Electrical contractors in Northern Ohio have joined forces in a new organization in an effort to rout the irresponsible elements in the industry in that territory. The new association is known as the Association of Certified Electricians, Inc., and has a membership of 35. The territory covered by the as-

sociation includes Ashland, Alliance, Elyria, Lorain, Mansfield, Sandusky and Warren and it is hoped to extend this until the organization grows to be statewide.

The purpose of the organization, it was announced, is to protect the public from irresponsible contractors and to reduce to a minimum unfair competition, embracing all acts characterized by bad faith, deception, fraud or mis-

representation. The association will also work to raise the standard of electrical installations and insist upon complete compliance with the state electrical code. An unusual feature is that the association will guarantee all work done by members.

A. B. Walton, Lorain, is president and the other officers are: Roy Wentz, Elyria, secretary-treasurer; E. L. Copes, Alliance, vice president.

## New York to Turn From Helpers to Apprentices

THE Council on Industrial Relations for the Electrical Construction Industry has just announced its decision in the New York City labor controversy which, while granting labor an increase of \$1.50 a day, gives to the contractor several working conditions for which he has been striving for some time.

The most important change from previous working agreements is the substitution of apprentices for helpers. Four classes of apprentices are provided with daily wages as follows: First year, \$2.40; second year, \$3.20; third year, \$5.04, and fourth year, \$8.

While the decision stated that the present helper class shall remain unchanged in classification and wages passing to journeyman's class when qualified, a provision was made whereby any helper could join any apprentice class to which he could qualify.

The helper's scale under the old agreement was \$7 per day.

The new wage scale goes into effect March 1 and the apprentice plan on April 1. The union has stated that it hoped to make most of the slightly more than fourteen hundred helpers in New York either journeymen or apprentices within a few months.

Under the old plan a one to one helper-journeyman ratio was permitted. Under the new plan the one to one ratio of apprentice-journeymen is permitted where one or two journeymen are employed on a job. Where more than two journeymen are employed on a job the one to two ratio will hold.

The employers, however, are not compelled to employ apprentices. On the other hand, it was decided that the most experienced apprentice shall be given preference in employment.

The council was careful to point out

that an apprentice may do anything that his employer requires of him provided the ratio is maintained. This is taken to mean that where formerly apprentices could not use tools or otherwise learn their trade on a job they can now do so. This is further substantiated by the fact that the council turned down the union request that only journeymen be allowed to operate tools by declaring that Article 22 of the agreement then in effect should hold. This decision also denied the union's demand that all pipe be cut on the job.

The union request that working rule No. 20 be amended to specifically make employers responsible for lost clothing during working hours and for tools at all times was denied.

The council also decided that the union must open its doors and increase its membership to a point where the city is more thoroughly unionized. In addition, provision was made for a joint control board of an equal number of employers and employees to govern union membership applications and apprenticeship plan in order to prevent any attempt to keep good men from getting cards.

In discussing this decision with L. K. Comstock, chairman of the council, but who did not sit on the council in this case, being an interested party, he pointed out that it would probably be a few months before the employers fully realized the benefits that they derive under this system. He felt that there would be some criticism over the fact that wages were advanced, but he pointed out that Detroit, Chicago, Cleveland and St. Louis all have \$12 rates and that it would be difficult to convince anybody that the largest city should pay less.

## Red Seal Progress

*The current year promises to be the biggest construction year in the history of the country. Each month the Red Seal campaign gains momentum. These two statements, taken together, mean this: The electrical contractor in districts eligible for the Red Seal, who talks, sells and works along Red Seal lines is going to reap a harvest of profits. And the contractors in other districts are going to miss opportunities for every minute they let go by without promoting a Red Seal set-up for their locality.—The Editor.*

**This Rochester architect has no official connection with the Red Seal campaign. But he recognizes its value and is advertising "Specializing in Red Seal Home Designs" on his business stationery.**

**ANNOUNCEMENT**  
Announcing the opening of offices for the practice of  
Architecture and Building Superintendence



**WALTER J SPROSS**  
Registered Architect  
POUGHKEEPSIE, N. Y.  
P. O. Box 306 Phone 3211



Specializing in "Red Seal" Home Designs

### Red Seal Increases Outlets

"An analysis of 69 Red Seal houses in Rochester shows that light outlets have increased 32 percent; switches, 14 percent; and convenience outlets, 10 percent, over the required number. The increase in the number of convenience outlets is really greater than shown in that all these installed are double."—*Electrical League of Rochester, N. Y.*

### Since Last Month—

Muncie, Ind., has put the Red Seal in operation.

Peoria, Ill., has arranged a meeting for architects and builders.

Kansas City, Mo., has announced it will go ahead with Red Seal operation in March.

The Tri-City Electrical League (Davenport, Ia., Rock Island and Moline, Ill.) has been organized for Red Seal work.

Youngstown, O., has explained the Red Seal Plan to a meeting of seventy architects and builders.

The Public Service League of Northern Illinois has met to consider Red Seal work.

Toledo, O., is considering Red Seal work.

Denver is printing its Red Seal specifications.

Akron, O., is maturing its Red Seal plans.

Kingston, N. Y., has opened a Red Seal home.

Atlanta has announced the opening of a Red Seal home in March, and has set its quota of homes for 1926 at several hundred.

Minneapolis has started its Red Seal advertising.

Memphis has put its Red Seal Plan into operation.

Houston has organized a league to pave the way for the Red Seal.

Chattanooga has included the Red Seal work in its budget.

Savannah has a Red Seal fund raised.

Columbia, S. C., has raised its Red Seal fund.

Wilmington, N. C., has applied to the S. E. D. for license.

The number of cities having the Red Seal Plan in operation has increased to 676, with a total population of 8,888,991.

### Lumber Dealer Ties In

The Keystone Lumber Company of Pittsburgh builds hundreds of small homes as a speculation. As a selling point the company advertises "standard materials." From now on its advertisements will list "Red Seal Wiring" as a standard specification. There could be no better illustration of how the Red Seal has captured the attention of both builders and public.

## Kansas Electragists Meet in Hutchinson

Trade policies, management problems and wiring standards were the three most important subjects discussed at the quarterly meeting of the Kansas Association of Electragists at Hutchinson on February 20.

An indiscriminate sales policy of certain fixture manufacturers was cited. The sale of fixtures on a state-wide scale direct to architects on major and special jobs with no co-operation being advanced to contractors who hold the wiring contract was freely condemned.

Jobber trade policies were then discussed. While the original practice of selling direct to large industrials has been an established precedent, it was reported the tendency has broadened to include many firms whose facilities render them dependent upon contractor service.

Frank J. Seiler, city electrician, Kansas City, Missouri, was the afternoon speaker on the subject "Standards of Wiring, Workmanship and Business Conduct for Electragists." This talk was of particular interest since the speaker is an ex-Electragist and has been active in local association and league work.

L. M. Atkinson, Pittsburg, Kansas, presided at the meeting. The Hutchinson Electragists entertained the visitors with a banquet and entertainment in the evening. The next quarterly state convention was set for Chanute, Kansas, on May 22, 1926, at which time arrangements will be formulated for encouraging a state conference of the building industry for the purpose of closer co-operation between architects, general contractors, electrical contractors and other crafts in better building standards, contractual relations, ethical letting of contracts, etc.

## Electrical Inspectors Organize in Northwest

A new organization of electrical inspectors was formed to represent all districts of Oregon and Washington at a meeting held in Portland on January 11-12, under the name of the Northwest Association of Electrical Inspectors. The enrollment numbered 118, this total exceeding expectations, and it is predicted that this membership will be rapidly increased.

The meeting on the first morning was devoted to forming a permanent organization by the election of officers and the afternoon session of the same day witnessed the first business session. Papers were presented on the making of a municipal code, on the changes in the 1925 Code and on the operations of the Underwriters Laboratories.

At the session on the following morning radio interference formed the chief topic of discussion, one speaker explaining what the central stations were doing to remove the causes of interference for which they were responsible. There was also presented at this session a paper by W. J. Canada on "Duties of the Field Secretary of the National Fire Protection Association." Mr. Canada, who holds that position, was unable to attend and his paper was read by E. G. S. Pryor.

"Dealers' License Law in the Portland Code" was a paper arousing much interest at the afternoon meeting of the second day. Following the presentation of several other addresses the association passed a resolution recommending revision of the national code to make conduit necessary in wiring school houses, assembly rooms and public meeting places.

Officers elected for the first year included L. W. Going, chief electrical inspector of Portland as president, W. P. Weathers, chief electrical inspector of Longview as vice president, and F. D. Weber, electrical engineer, Oregon Insurance Rating Bureau, as secretary and treasurer.

### St. Petersburg Now Has Association

A local association has been formed at St. Petersburg, Fla., under the name of the Electric League of St. Petersburg. T. A. Brown is president, Alex Brinson vice president and Gardiner Blackman is secretary and treasurer. The executive board consists of T. A. Brown, chairman; R. D. Summerkamp, L. D. Lacey, L. J. Chevalier and G. Blackman.

Meetings will be held every Wednesday night in the office of the St. Petersburg Electrical Company until permanent quarters can be obtained. The organization has adopted the constitution and by-laws of the Florida state association and modified them to suit the local needs.

### Eastern Inspectors at Annual Meet

The first annual meeting of the newly organized Eastern Association of Electrical Inspectors was held February 10 in the Hartford Electric Light Company's hall at Hartford, Conn. The organization is the successor to the old Western New England Association of Electrical Inspectors, but has enlarged the membership of that body and includes more territory than the old organization covered.

At the first session, held in the morning, there was a discussion of the National Electrical Code grounding requirements, led by Dr. M. J. Lloyd, electrical engineer of the Bureau of Standards. In the afternoon, after a short business meeting, Harry B. Kirk-

land, of the Society for Electrical Development, spoke on the Uniform Electrical Ordinance. Following this paper came one on the attitude of the electrical industry toward the inspector, delivered by Earle E. Whitehorne, of the *Electrical World*.

The object of the association, as re-organized, it was announced, will be to promote a uniform interpretation and enforcement of the National code to secure a better and more uniform standard of electrical construction.

Headquarters have been established at 123 William street, New York City, and the officers for the ensuing year are: J. C. Forsyth, president; W. C. Field, J. C. Rohan and R. M. Nesbitt, vice presidents; A. W. Hopkins, treasurer, and E. P. Slack, secretary.

### Inspectors Consider Fuse Abuse

It was evident from the discussion before the twenty-first annual convention of the Western Association of Electrical Inspectors, held in Chicago, February 2, that the electrical industry is doing a lot of thinking about the fuse abuse problem, but that it is yet a long way from its solution.

A symposium on this subject was one of the features of the meeting, prepared discussion being presented by William P. Briggs, inspector of wires, New Bedford, Mass.; Joseph C. Langdell, meter engineer, Hodenpyl, Hardy & Company, Jackson, Mich.; J. L. Frank, president, Mutual Electric & Machine Company, Detroit, Mich.; Karl Bausman, supervisor, meter and test department, Dayton (Ohio) Power & Light Company; A. Penn Denton, chairman, National Code Committee, Association of Electricians, International; Howard M. Maxwell, electrical inspector, Ohio Inspection Bureau, Dayton, Ohio, and John W. Kelly, Jr., deputy director of public safety, Camden, N. J.

It was conceded that real progress had been made in curtailing main fuse abuse by use of sealed service cabinets. Branch circuit fuse abuse was another problem, however. Mr. Briggs presented a new type of plug fuse with the parallel blade and adapter for present cut-outs. It was non-interchangeable because each size had a different distance between blades.

Other suggestions had to do largely with public education, an interesting

point being made by Mr. Kelly, who stated that in Camden they started their fuse education in the schools.

This was one of the best attended conventions ever held by the association. The program was of very broad interest and showed an awakening on the part of the inspector to the important role that he plays in the industry.

Considerable interest was shown in the subject of re-inspection, following an address on that topic by S. B. Williams, editor of THE ELECTRICIAN. It was apparent that the number of cities with re-inspection service is going to grow.

W. J. Canada, electrical field secretary, N. F. P. A., presented a carefully prepared report on the progress toward uniform use of the Code.

The Red Seal, Uniform Electrical Ordinance, Local Code Committee Work, Electrical Work at the Bureau of Standards, Flexible Cord Abuse and Lighting were other addresses.

The association voted to become a group or section of the International Association of Electrical Inspectors. Officers were elected as follows: James S. Mahan, Chicago, president; John W. Kelly, Jr., Camden, N. J., and Harley R. Markel, Columbus, Ohio, vice presidents; W. S. Boyd, Chicago, secretary-treasurer; L. A. Barley, Denver; W. P. Briggs, New Bedford; M. P. Ellis, Chicago, and W. A. Hartz, Milwaukee, executive committeemen. The 1927 meeting is scheduled for Kansas City.

### St. Louis Contractors Hear Market Statistics

The future of the electrical industry in the St. Louis district was the subject of an address delivered by C. E. Michel, Union Electric Light and Power Company, before a meeting of the contractors section of the St. Louis Electrical Board of Trade on February 11. After referring to the greatly increased consumption of power in the district in the last twelve years, Mr. Michel went on to consider the market for wiring. He stated that comparatively few unwired houses remained in the district and that the majority of these probably would never be wired as they were largely homes in the path of commercial or industrial development and faced destruction in the near future.

Other unwired houses were in such a state of deterioration that they are scarcely worth wiring he declared. Hence the contractors and the central station in seeking to maintain the annual increase in business must look to the increasing use of current and appliances by the consumers. He said the appliance field had scarcely been touched as yet.

The importance of a good accounting system was emphasized by W. A. Williford, credit manager, Graybar Electric Company, who urged contractors not using an accounting system to install one at once. He explained the relation between good accounting and a good credit rating.

F. A. Wiebe, sales manager, Brown & Hall Supply Company, suggested that contractors should not only plan the wiring, but the lighting equipment, power equipment and appliances as well. He urged that the contractors call in the jobber's specialty men to help them in selling the job complete.

### Wisconsin Contractors Hold Informal Convention

The winter convention of the Wisconsin Association of Electrical Contractors and Dealers was held at Milwaukee on January 28 and 29. The banquet was held the evening of the first day.

Instead of following the usual procedure of listening to a number of scheduled talks the convention was of an informal nature in which a number of interesting topics were discussed by all.

The most animated discussion took

place over the proposal to again try for a state licensing law. On a show of hands there was a difference of opinion as to the advisability of including licensing of journeymen.

During the discussion mention was made of the proposed legislation for state unemployment insurance.

A number of other topics were discussed, including the handling of radio by non-electrical stores.

### San Franciscans Banquet

The most successful banquet ever held by the San Francisco Association of Electrical Contractors and Dealers took place on January 16 at the Hotel Whitcomb. It was attended by 263 persons, representing all branches of the industry.

Officers of the San Francisco organization for 1926 have been elected as follows: Charles Shipman, president; Sam Radelfinger, vice president; Victor Lemoge and Edward Martin, executive committee members.

### Long Beach Organizes

A local branch of the California Electragists, Southern Division, was formed at Long Beach recently, with six firms as charter members. They include the Acme Electric Company, Baty Electric Company, Kuster-Wetzel Electric Company, Lane Electric Company, Mott Electric Company and Newcomb Electric Company.

### K. C. Electric Club Elections

The roster of officers of the Kansas City Electric Club for 1926 has been announced as follows: F. S. Dewey, president; A. E. Bettis, W. M. Hand, John J. Magee and R. C. McNeely, vice presidents; Joseph F. Porter Jr., treasurer. The directors at large are: H. C. Bonfig, J. G. Crane, A. Penn Denton, George Fiske, G. S. Gillespie, E. F. Hardey, R. W. Hodge, E. G. Stephens and J. D. Todd.

At the first directors' meeting after the election the budget for the year was set at \$13,900. This includes \$700 for the industrial lighting campaign and \$3,700 for the Red Seal plan campaign. It also provides for an educational exhibit on the Red Seal plan in the home-building show held during the last week in February.

The first step in the industrial lighting campaign was taken recently when

the club mailed out the "Better Factory Lighting" booklet to a selected prospect list of 585 firms.

### Washington League Officers

L. T. Souder was elected president of the Electric League of Washington, D. C., at the 1926 annual election of officers of that organization. Other officers elected were: E. R. Bateman, vice president; F. T. Shull, treasurer; P. A. Davis, secretary; N. H. Barnes, assistant secretary.

### New York's Giant Electrical Luncheon

A luncheon meeting, held at the Hotel Astor, New York, on January 22, and sponsored jointly by the New York Electrical League and the Electrical Board of Trade of New York, drew forth an attendance of over a thousand, one of the largest gatherings of the sort ever held in New York or elsewhere. Arthur Williams, president of the electrical league, presided and Charles L. Eidlitz addressed the meeting on the problems and successes of the board of trade. W. J. Drury, the outgoing president of the league, introduced his successor, Albert Goldman, the new commissioner of plants and structures for New York City.

The meeting was signalized not only by its size, but by the fact that so many men of national prominence in the industry were in attendance. These included, among others, Owen D. Young, Edwin M. Herr, George B. Cortelyou and Guy E. Tripp.

### Rochester Contractors Hear Davis and Rost

O. Fred Rost, president of the Newark (N. J.) Electrical Supply Company, and Laurence W. Davis, general manager of the A. E. I., were the speakers at a meeting of the Distributors and Contractors Section of the Rochester Electrical League, held January 29.

Discussing the problems confronting the electrical merchandiser, Mr. Rost said that conditions would be better in the industry if the jobbers and contractors would get together and look at their difficulties from both sides of the fence. One side should not ask the other to do something that they would not be willing to do themselves.

The responsibility of the contractor-

dealer to himself and to his competitor was treated at length by Mr. Davis, who showed that the success of a contractor's business depended a good deal on fair competition and that when one firm competed unfairly it forced all to do so and ruined the business for all.

About 125 members of the league were in attendance. At the close of the meeting the personnel of the executive committee for 1926 was announced.

### New Code in South Dakota City

A new electrical code for Huron, South Dakota, has just been adopted by the action of the city commissioners. It follows the Model Ordinance approved by the A. E. I., in that it provides wiring regulations be in accord with the National Electrical Code.

Re-inspection is provided for in the ordinance and the inspector is empowered to order any faulty installation disconnected if the faults are not remedied fifteen days after the owner is notified of the facts. Fine and imprisonment is made the penalty for failure to comply with the provisions of the ordinance. There is also a section calling for examination and licensing of master electricians, the fee for both new licenses and renewals being \$20 per year. Application for each license must be accompanied with a \$500 bond.

A most unusual feature in the ordinance is the provision that the city inspector shall hold membership in the N. F. P. A., and whatever inspectors' association he is eligible for and that all expenses connected with such membership shall be paid by the city.

### Results of Price Maintenance Legislation

The referendum on the question of whether there should or should not be price maintenance legislation, conducted by the Chamber of Commerce of the United States, showed that a plurality of members voting were in favor of the proposition as outlined by the chamber. However, since the by-laws provide that the organization is not committed on any referendum unless there is a two-thirds majority for or against, the results will permit the chamber to take no official position on the question.

## Southern California Electragists Meet at Catalina



Throwing Care to the Winds at Catalina. Left to Right: "Vic" Lemoige, Harry Walker and Frank McGinley

A PROGRAM covering subjects which ranged from central station relations and co-operation to contractors' management methods occupied the attention of the third quarterly meeting of the California Electragists, Southern Division, held at Catalina, January 22-23. More than 225 members of the industry attended the convention.

The first business session, on the afternoon of January 22, was devoted to merchandising methods and co-operation with the power companies. The splendid contact which has been established between contractors and the Southern California Edison Company was discussed and the sales plans formulated by the power company for the promotion of range and water-heater installations were explained. Electrical refrigeration was also considered at this meeting.

Papers presented at this meeting were concerned with the 1926 merchandising program of the Southern California Edison Company, with domestic refrigeration in the electrical industry, with advertising by the contractor-dealer and with store and window display.

A members' meeting followed, at which C. J. Geisbush, executive secretary, outlined the accomplishments of the organization in the past year and

the report of the executive committee was presented. H. H. Walker, president, who presided at this meeting, appealed to the members to support the California Electrical Bureau in its work. At this session Del Monte was selected as the next meeting place.

A general open meeting was held the next morning with Mr. Walker in the chair. Subjects discussed were the Red Seal Plan, the need of specifications for telephone conduits and the importance of the business guide for small contractor-dealers, recently published by the electrical supply jobbers of Los Angeles.

### National Advertising Campaigns on Appliances

An outline of the concurrent advertising campaigns on electric toasters and percolators is given in a booklet just published by the Commercial Section, National Electric Light Association. According to the booklet, the Commercial Section has arranged with a number of manufacturers of these devices for their national advertising on toasters to appear in magazines during the month of March and on percolators during the period between April 15 and May 15.

## Estimating Series Ready for Members

A forty-seven page booklet, containing the complete series of Arthur L. Abbott's articles on "Estimating for Electrical Contractors," is now ready for distribution to members of the A. E. I. The series originally ran in THE ELECTRAGIST over a period of twelve months and the demand from members for back copies containing the series was so strong that it was decided to compile

the articles and make them available in a single edition. Distribution is limited to members only, since the work of assembling the data was done by Mr. Abbott as technical director A. E. I.

## Manufacturers Meet in June

The annual meeting of the Associated Manufacturers of Electrical Supplies will be held at The Homestead, Hot Springs, Va., during the week of June 7.

## New Electragists

The following list of contractor-dealers have made application for membership and been accepted into the A. E. I. since the publication of the last list in the February issue:

### DELAWARE

#### Wilmington:

Alexander & McDaniel, Inc.

### DISTRICT OF COLUMBIA

#### Washington:

Delta Electric Co.

### FLORIDA

#### Miami:

The Harrington Electric Co.

### GEORGIA

#### Atlanta:

Fulton Bros. Electric Co.

#### Augusta:

Carter-Alrich Electric Co.

### ILLINOIS

#### Alton:

Service Electric Co.

#### Cicero:

Adam L. Gosciewicz.

### MASSACHUSETTS

#### Braintree:

Charles M. Bestick, Inc.

### NEW HAMPSHIRE

#### Laconia:

Foster & Collin, Inc.

### NEW JERSEY

#### Atlantic City:

Bart A. Bullock.  
Stanley C. Leek.  
Stockinger Electric Motor Works.

#### Camden:

Continental Electric Co.

#### Pleasantville:

H. W. McConnell Electric Co.

#### Pompton Lakes:

Lank Electric Co.

### NEW YORK

#### Catskill:

H. N. Warden.

### NORTH CAROLINA

#### Asheville:

Personal Service Electric Co.

#### Greensboro:

C. L. Ellison.  
Harold L. Ross, Electrical Engineer.

#### Raleigh:

Thompson Electrical Co.

#### Statesville:

Mills Electric Co.

### OREGON

#### Baker:

The Baker Electric Supply Co., Inc.

### PENNSYLVANIA

#### Ardmore:

Cecil H. Vaughan.

#### Chester:

Chester Light Supply Co.  
Moore Modern Electric Co., Inc.  
Lewis J. Pierce.

#### Erie:

M. B. Schutte Electric Co.

#### Intercourse:

Enos L. Zimmerman.

#### Lancaster:

C. Roy Barr.

#### Marcus Hook:

William H. Heacock.

#### Media:

Walter G. Seaver.

#### Philadelphia:

Herman Mayer Co., Inc.

#### Ridley Park:

William A. Griswold, Jr.

#### Swarthmore:

Walter H. Baird.

#### Upland:

Howard J. Jenkins.  
John R. Loughhead.

#### York:

I. B. Abel & Son.  
H. E. Goodling Electric Co.  
Home Electric Co.

## OBITUARIES

### A. R. Bush

Arthur R. Bush, manager of the industrial department of the General Electric Company, died at his home in Schenectady on January 24. Mr. Bush was born in Fall River, Mass., in 1861. He graduated from Annapolis in 1882 and served two years in the United States Navy. In 1884 he entered the employ of the Edison Company, following which he was connected with the New England Wiring and Construction Company. In 1892 he was made district engineer of the Edison General Electric Company in the New England district, resigning this position in 1904 to accept the vice presidency of the Union Bag and Paper Company. He remained with this concern until 1906, when he returned to the General Electric Company, where he became manager of the power and mining department and later manager of the industrial department.

### Fred W. Gilbey

Fred W. Gilbey, electrical engineer for Edward Joy Company, Syracuse, N. Y., died on December 31. He had been in the employ of the Edward Joy Company for eighteen years and was well known throughout the industry.

## News Notes Concerning Contractor-Dealers

J. O. Humphrey has purchased the Electric Shop, Monroe City, Mo., from William Smallwood.

Announcement has been made of the formation of a new electrical contracting firm in Stroudsburg, Pa., under the firm name of Woolever & Gelinas.

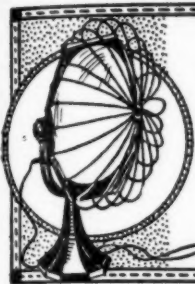
Ionia, Mich., has a new electrical appliance shop under the ownership of Roy Weber and George Dean. The new store will handle fixtures and appliances.

Stewart S. Holtzinger, electrical contractor, York, Pa., has moved to new quarters on West Broadway in that city.

Wayne Brookshire has leased store space at 627 Somerset street, Bellflower, Cal., and will conduct an electrical fixture and wiring business. He will specialize in wiring and repairing of motors.

## • MANUFACTURING •

A Department Devoted to the Latest Devices Used by the Electrical Contractor and Dealer



### Box Connector

A new and approved box connector is now being marketed by the Thomas & Betts Co., New York City, under the trademark "T & B Slip-In" connector. The advantages cited for the new connector are that it has no loose parts and no locknut; that it gives a secure, direct ground, so strong that no amount of tugging can pull the cable out; that it requires only one operation to install, that of tightening down the screw; that



it insures against violations because of loose locknut or poor ground. It is made of one-piece malleable iron and has a very large screw with a wide slot in the head.

### Current Tap

The Reynolds Spring Company, Jackson, Mich. manufacturers of hot molded electrical convenience fittings, has included in its group of multiple current taps a light 3-way angle tap. It is made of "Reynolite," its brown finish is permanent and the toughness of this material has made possible a compact design.

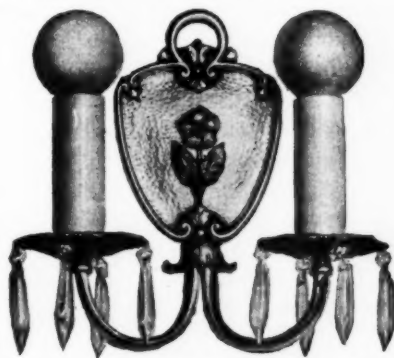
### Cabinet Range

An addition to the line of electric ranges manufactured by the Westinghouse Electric and Manufacturing Company is now ready. It is being put out under the name "Senior Cabinet Range" and is a larger edition of the "Junior Cabinet." It has four surface heating units, two of 1,000 watts, one of 1,500

watts (a hot spot heater) and one of 1,800 watts. The oven has two units of 1,800 watts each. It comes in full-automatic, half-automatic and non-automatic types, and in black finish and gray enamel finish, the latter being the more expensive. Prices range from \$170 to \$240.

### Lighting Fixtures

The Beardslee Chandelier Manufacturing Company, Chicago, has created a new line of designs for its fixtures to meet the preference for lighter, more graceful and more colorful illuminating equipment for the home. The design shown in the cut below is No. N26-2 and is an excellent example of the design of the line. It projects 3½ in. from the wall, has a spread of 6½ in. and has a cast brass back 4½ in. wide. The tube arms are oval and have pull-chain sockets. It is finished in Tuscan brass and color.



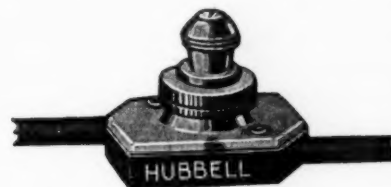
The new designs include five-light chandeliers, five-light ceiling fixtures, some of the candle type with crystal trim, three-light chandeliers suitable for halls or bedrooms, single-light ceiling fixtures in an antique Ivory finish with floral ornaments in color, and a large number of wall-bracket designs. Some of the designs are finished in silver with the majority of them in Tuscan brass and color. It is noted that there is a tendency toward the use of shorter ceiling fixtures, except in the

dining room where the pendant chandelier is still preferred. This is in line with the modern trend toward the lower ceiling.

A new line of bathroom fixtures is also being put out by the company. These are made of vitrified pottery with a glazed white surface that can be washed with soap and water without harming the finish. A further advantage is that they are moisture-proof. The line includes a ceiling light and two wall brackets, one with convenience outlet.

### Hubbell Devices

Harvey Hubbell, Inc., Bridgeport, Conn., has recently brought out a new canopy switch. It is designed for fixture work and is particularly suitable for side wall canopies and brackets. The switch is small, compact and neat in appearance and the handle may be turned in either direction without danger of unscrewing. Vibration cannot loosen it. The switch can be quickly



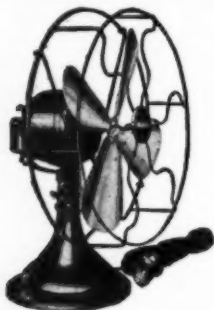
installed and the handle does not have to be removed when installing. It is made with three different lengths of stems, 3/16-in. stem, 5/16-in. stem and 7/16-in. stem.

The company has also announced a new line of black porcelain convenience outlets with plain faces. The face of this new outlet is smooth, unmarked and highly glazed and is slightly recessed to guide the attachment plug cap blades into the "T-Slots." They are made in the shallow, side-wired type, both single and duplex, and replace the Hubbell outlets of the same type with marked faces.

### Oscillating Fan

To fill a need for a lower priced three-speed oscillating fan, the Wagner Electric Corporation, St. Louis, has developed a 10-in. fan that will retail at \$16.50.

It is powered with a Wagner induction motor, cool and quiet in operation



and having no brushes or commutator to wear out. Bearings are of bronze. The three speeds are regulated by a lever switch in the base. The fan oscillates in an arc of 90 degrees and a bracket joint permits a forward tilt of 22½ degrees, with clamps to hold it at any desired angle. This permits the fan to be used either for desk or wall mounting.

The blades of the fan are of polished brass; the body is finished in dull black, and an 8-foot abrasion-proof cord with a two-piece plug is included.

### Vacuum Cleaner

The Hoover Company, North Canton, Ohio, has perfected and placed on the market a new model, known as "Model 700." Changes have been made in construction and appearance and Model 700, from the standpoint of efficiency and durability, is claimed to be superior to the previous models.

The most outstanding of the changes is called "Positive Agitation," being the principle of beating. This has been secured through changes in the old motor-driven brush, rigid steel beater bars having been substituted for the soft hair brush.

The steel beaters curve around a cylinder; they open up the nap of the carpet, beating loose the dirt embedded therein. Set straight across the "Agitator," on opposite sides of the beater bars, are two brushes of soft goat hair. These now have as their function to sweep away the clinging type of dirt, such as thread, lint and hair. The brushes are held in place by spring latches so that they can be removed and

replaced when, in time, they become worn.

### Covered Cutouts

Various localities now require the use of dead front cutouts in place of the style where the terminals are exposed. To meet this demand the Trumbull Electric Manufacturing Company, Plainville, Conn., has brought out two and four circuit covered cutouts. Covers are of steel backed by an insulating plate with test holes which permit testing without removing the cover plate. Card holders are provided so that each circuit may be properly labelled. They may be wired for single fusing with two or three-wire mains or for double fusing with two wire mains.

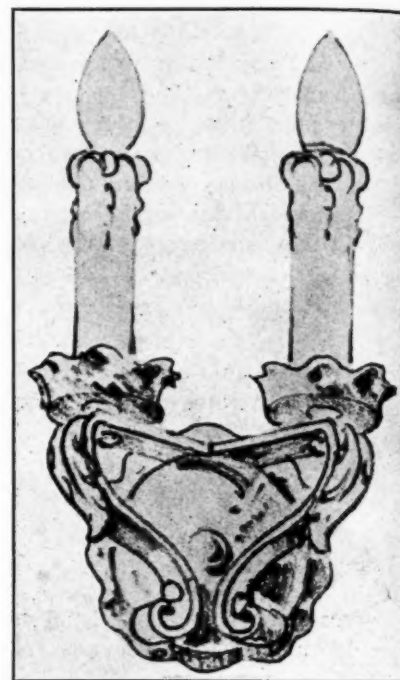
An additional advantage claimed is that screws cannot fall out when cover is removed to wire. When arranged in gangs, covers are held together by screws which insure pressure connections for grounding purposes. There are grooves in side for meter connections and ground connection is determined by location and color. Covers extend over contact terminals and barriers are not required.

### Fan Outlet and Support

The Russell & Stoll Co., New York City, has announced a new outlet that can be used for fans, illuminated picture mountings, glow heaters and other fairly heavy devices that it is desired to attach to a wall. It consists of a receptacle of the standard convenience outlet type, mounted to a sherardized steel plate. This plate is held to the switch box cover by the usual iron cover screws, and also by a toggle bolt which draws up through a galvanized iron yoke against the back of the switch box cover. This toggle has an internal and external thread, the internal thread accommodating the No. 14-20 brass-plated steel screw and washer which supports the fan or other device. The receptacle will accommodate any of the standard attachment plug caps; and any standard 4-in. square outlet box with standard raised cover can be used with the fitting. The device has been tested and approved by the Underwriters Laboratories and the Electrical Testing Laboratories, the results showing that the fitting withstood a mechanical test of 1,014 pounds.

### Luminaires

The lighting needs of bungalows and small houses were the inspiration of the designers of the Edwin F. Guth Company, St. Louis, in making the drawings for the company's new line of wall and ceiling brackets. The entire new line goes under the name "Forgecraft," being of forged iron and copper and mainly in antique finishes. Illustrated here is a wall bracket, typical of the line, being of waxed iron and old



copper. It has a height of 12 in. and a spread of 4½ in. The candles are drip antique and are 5 in. high. It has pull sockets. The fixtures are furnished complete with the exception of lamps. All chandeliers and brackets are wired but not assembled, arms and sockets having sufficient wire extending from arm to allow for connections in body. All candle-trimmed brackets are furnished with pull-chain fibre sockets and all candle-trimmed chandeliers with keyless fibre sockets.

### Appliance Switch Plug

The Arrow Electric Company, Hartford, Conn., has brought out a new appliance switch plug, fitting practically all makes of standard heating appliances. It permits control of the device by means of a tumbler switch which is part of the plug, without pulling the plug from the appliance. It is made in a 660-w. 250-v. size.

# X-Ray

TRADE MARK REG.

## Super Reflectors

### Super Light—Why?

Up-to-the-minute merchants the country wide are realizing that more light in the show window means more sales in the store. X-Ray Super-reflectors have made possible the use of the efficient 500-watt Mazda lamp—thus revolutionizing show window lighting.

Sell Giant and Leviathan Reflectors—merchants want and need them!

**CURTIS  
LIGHTING, Inc.**  
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New York  
3113 W. Sixth St.  
Los Angeles

**GIANT  
No. 900**



**Holders  
and  
Mogul  
Sockets  
Free!**

## Job Press Equipment

A single-phase, adjustable, varying speed motor, with control equipment for job press work, has been developed by the General Electric Company. It is in 60, 50, 40 and 25 cycle types and is interchangeable for 110- or 220-v. circuits. It is listed as type BSR. There is an enclosed safety switch on the pedestal controller for convenience in stopping and starting by the operator. A hand lever control operates the rod which shifts the motor brushes, to change the speed through a gear reduction, thus making it easy for the operator to obtain fine speed adjustments. An indicating dial on top of the pedestal permits resetting speed for register work.

## Automatic Doughnut Machine

A new all-electric automatic doughnut machine with a capacity of approximately 5,000 doughnuts per hour has been placed on the market by the Doughnut Machine Corporation, New York City. This machine performs all the operations of cutting, frying, turning, ejecting and conveying the finished doughnuts automatically. It produces a uniform product and eliminates odors.

The machine is enclosed with a sheet aluminum with wire glass windows in the top half, all parts being accessible and the complete operation being visible. The entire machine, with the exception of the blower which furnishes compressed air, is operated by a  $\frac{1}{2}$ -horsepower motor. The electric heating units and motors are made by the General Electric Company.

## Manufacturing Notes

H. S. Hill has been engaged by the Trumbull Electric Manufacturing Company, Plainville, Conn., as sales representative in Atlanta.

The American Circular Loom Company, New York City, has added the Henger-Fairfield Company, of Cleveland, to its selling organization. The Henger-Fairfield Company will look after sales throughout Ohio and Kentucky.

A. E. Tregenza, who has been assistant to the president of the Chicago Fuse

Manufacturing Company, Chicago, has been appointed vice president of the company in charge of sales. Before coming to the Chicago Fuse Manufacturing Company he was general sales manager of the Economy Fuse and Manufacturing Company for 12 years and previous to that was with the Nernst Lamp Company as salesman.

Wood & Lane, St. Louis, have been appointed to act as Southwest sales agents for the Steel City Electric Company, Pittsburgh. Their territory will include Iowa, Nebraska, Missouri, Kansas, Arkansas, Oklahoma and Texas.

A three-color, counter display carton is now being used by the Chicago Fuse Manufacturing Company for packing its fuses. Twenty individual boxes, each containing five fuses, are packed in the display carton. Printed on each box are instructions for the use of fuses. With orders amounting to 2,000 or more fuses the dealer's name, address and telephone number will be imprinted on each individual box.

Effective February 1, J. A. Hawks, Inc., succeeded Gates & Hawks, Inc., New York City. The company will continue to represent in the New York territory the Garland Manufacturing Company, Pittsburgh, producers of conduit.

John F. Meyn & Co., St. Louis, representatives of the Auth Electrical Specialty Company, New York City, have changed their address to 121 North Nineteenth street that city.

Since the reorganization of the supply department of the Western Electric Company as the Graybar Electric Company a number of executive appointments have been made. These include the appointment of George E. Cullinan as vice president in charge of sales and his election as a director; the promotion of Leo M. Dunn to the position of vice president in charge of merchandising and accounting; the promotion of W. O. Ramsburg as general service manager, of G. E. Chase as broadcasting sales manager, of A. J. Eaves as carrier telephone sales manager and of R. M. Hatfield as public address sales manager. C. E. Redding has been appointed appliance engineer and W. A. Fouhy is the newly appointed plant engineer.

The Arrow Electric Company, Hart-

ford, Conn., is distributing new catalog pages with list price changes on a number of their products.

New appointments have been made by the Square D Company, Detroit, as follows: G. E. Daub, Atlanta territory; R. L. McCreary, Cleveland territory; J. F. O'Hara, Detroit territory; Jack Kingsley, Springfield (Mass.) branch sales manager; C. L. Hull, eastern district sales manager; S. A. Rapier, export manager.

The General Electric Company is to establish a manufacturing unit in St. Louis, according to the announcement of Gerard Swope, president. A manufacturing site, aggregating about 155 acres, partly inside and partly just outside the city limits, is being negotiated for.

A bulletin listing the types of traffic controllers and sign flashers manufactured by the company is now being issued monthly by James H. Betts, Inc., New York City. The publication will describe the use of sign flashers and other devices made by the company.

The P. A. Geier Company is sending to its dealers a booklet describing and illustrating its dealer helps and the cooperation it is prepared to extend to both dealers in and users of its products.

Harry A. Duryea, formerly a division manager for the Electric Vacuum Cleaner Company, has been appointed sales manager of the portable cleaner division of the United Electric Company, Canton, Ohio. Another appointment announced is that of Walter C. Wicker as sales manager of the "Tuec" installed cleaner division of the company.

On February 15 the Scott-Jaqua Company, Inc., moved into its new quarters in the Indiana Terminal Warehouse Building, Indianapolis, Ind. The new location will enable the company to offer its dealer-customers over-night delivery throughout its territory.

The Alexander & Levenson Electric Supply Company, San Francisco, Cal., has been appointed a distributing jobber for merchandise of the General Electric Company.